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# West Europe Report

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# WEST EUROPE REPORT

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POLITICAL NETHERLANDS

# NEW LABOR PARTY CHAIRMAN SINT PROFILED

Amsterdam DE TIJD in Dutch 19 Dec 86 pp 8-12

[Interview with Marjanne Sint, new chairman of the PvdA, by Gerard Driehuis: "Marjanne Sint, PvdA Chairman of Calvinist Persuasion"; at an Amsterdam hotel and at her home; date not specified]

[Text] A former student of Nijenrode as parliamentary party chairman, the manager of a publishing giant as party chairman. Troelstra would not have believed his eyes. Marjanne Sint will succeed Max van den Berg. She became a secretary via Schroevers, but she became a yuppie and a politician. "If I am able to do something, then I should do it." Interview with a determined newcomer.

It takes some getting used to after Max van den Berg. With Marjanne Sint you can laugh — at least when the tape recorder is off. Or exchange anecdotes about the corner shopkeeper. A dangerous question produces suppressed giggling and there is no other party chairman who blushes so disarmingly.

She is supposed to be the prototype of a yuppie. That seems to be true on paper. She is young (37 years old), urban (lives in the center of Amsterdam), and very professional. She studied economics, climbed the civil service ladder, became a successful journalist with INTERMEDIAIR and then manager of the company which publishes this newspaper — and so many other newspapers.

And then she became, she will become chairman of the Labor Party. In the absence of an opposing candidate, on 2 April M. Sint will be elected to succeed Max van den Berg. There was one opposing candidate, former Minister Jan Pronk, but he withdrew when it became clear to him that he had no chance of success against Marjanne Sint.

Why exactly is she the candidate of the party elite? "Because she is quite an expert, and not controversial," commented someone in the party leadership. Another said: "Because it strengthens the new image of the PvdA: the union man Kok and the business woman Sint; perhaps that way we will once again be able to really win the elections."

She is no stranger to the party. She has served as party leader in the past and was responsible for the economic paragraph in the last electoral program. But still. The manager of VNU, a multinational publishing giant, as leader of the socialist party? That is not the first thing you expect.

"You asked the wrong question. You could also say: it is unusual for someone who has long been active in politics to become manager of a business."

The first interview. An Amsterdam hotel; other managers were seated at the other tables. The conversation about who will pay the bill was stifled by the realization that it would necessarily end up being the VNU. She is younger than she looks in the photograph, and considerably more pleasant than I—with my prejudices—had expected from a career woman. But unpleasant enough to set out conditions. She still has to be elected, "thus, do not count on any controversial statements." The second interview took place at her home, "but I would prefer it if you did not give any descriptions of the interior. That is nobody's business." But she would like to know if the pictures turned out.

[Question] Tell me something about your background. Girls do not study economics. Why did you do it anyhow?

[Answer] That is true. Of the 250 freshmen there were 8 girls. I will tell you honestly why I studied economics. I had graduated from high school — the classical section. My parents thought that I would become an office clerk. That was suitable for me. My mother's ideal was that I might be able to become the secretary of a professor.

[Question] What was your parents' occupation?

[Answer] They both worked. Just say: low-ranking civil servants. We lived in the center of Amsterdam. From my primary school you could not go on to the gymnasium. It was a school where you were too far behind to be able to pass the entry exam.

Consequently, I went to technical high school. During my fourth year I also went to Schroevers, that is to say secretarial training. After all, I was going to become secretary, right. I was a very submissive young girl, but at Schroevers I discovered for the first time that I really did not want to do that. And at school I was very good at economics. I also had a teacher who developed my enthusiasm for it. You are sixteen and you don't know anything. I asked that teacher if he thought that a girl could study economics. course that is possible. Did you know that one of the most famous economists is a woman, Joan Robinson?" That became my first rebellious act. Then, without telling my parents about it, I went, with fear in my heart, to register at the Maagdenhuis. That was in 1967. That produced some consternation. My parents did think that it was very nice, but they didn't want, could not pay for it. And we did not qualify for a scholarship either. That could have been overcome if they had signed a statement that they did not want to pay; then I would have been entitled to an interest-free loan. Naturally, we did have some conflicts about that. We talked about it for a long time, and finally I said: all right, I will take care of it myself.

I worked all through school — after all, I did have the Schroevers degree. First as an accounting machine operator and invoice typist in a small office, later at a research institute. After I earned my first degree I could be an assistant. That was fantastic. At first I earned 208 guilders per month, and then suddenly I earned 563 guilders. I never felt richer than I did then.

No Women

[Question] You weren't active in the student movement during your student years when everything was happening?

[Answer] (Fiercely) I had other things to do. It was easy to preach about the revolution with a scholarship and an allowance from home. I wanted to graduate as soon as possible.

[Question] And when you graduated, straight to a career?

[Answer] I first had a job interview with the tax inspection service. But at that time — late 1973 — they preferred not to hire women for that position. And they simply told me that.

[Question] And you didn't respond?

[Answer] I thought it was strange, but I did think that it was normal. "The inspectorate is a tough department, and therefore we do not hire women for that."

She ended up at the Ministry of Economic Affairs, with the task of developing a regional economic policy for South Limburg. Ruud Lubbers was minister at the time.

[Question] Did you also have to deal with Lubbers? Or did you only see him walking by in the hall?

[Answer] You did not see him in the hall, because at the Ministry of Economic Affairs the officials have their own hall. Ordinary people are not allowed there. I did attend discussions with the minister, but then I was supposed to keep my mouth shut as much as possible.

[Questions] Now you will have to do business with Lubbers, won't you?

[Answer] That could be, yes. But he probably will not remember me.

In the Deep

This was followed by a disappointing period with the Ministry of Culture, Recreation and Social Work, and then her career at VNU. "In May 1979 I went to INTERMEDIAIR as economics editor. I didn't want to remain in the civil service. I thought: what else can I do? I can write very well and I think that economics is a nice subject. So.

[Question] After more than a year you became editor-in-chief.

[Answer] That happened very quickly, that is true.

[Question] In 1981 you became publisher at INTERMEDIAIR. Again extremely quickly.

[Answer] As a matter of fact, that caused a few wry faces. "That woman just got here and she has already made it up to there. What is so special about her?" At that time I really did jump into the deep. I had never drawn up any marketing plans or prepared any budgets. Of course, I did have my knowledge of economics, and especially my common sense. And the support of good people around me.

[Question] Had you been a member of the PvdA all this time?

[Answer] I became a member while I was working with the Ministry of Economic Affairs. At that time I was about 25 years old. Of course, I was already interested in politics. At the time I participated in car pooling and one of the others in the car was active in the PvdA. That person persuaded me to become a member also.

[Question] Is it possible that you might not become chairman?

[Answer] I have no idea. It is not possible for other candidates to appear; that period has been closed. But I still have to be elected by the congress, and that is why I am somewhat cautious.

[Question] If you were to say something very stupid now, and I were to write it down...

[Answer] ... yes, then it could possibly still go wrong. If I suddenly were to prove to be 30 years older than I have pretended to be or something like that. But I am assuming that everything will turn out all right.

#### No Aversion

[Question] An economist and manager as chairman. Until 2 April you will have to ensure profits for VNU. That is not a popular theme in the PvdA. Business and industry are not generously represented.

[Answer] That is also partly due to the nature of the party.

[Question] It is not in the nature of the PvdA for people who work in enterprises to be active in the party? What kind of nonsense is that?

[Answer] As a matter of fact, it is not in the nature of the PvdA for managers to be active in it. But business and industry, on the other hand, do belong to the nature of the PvdA. There is no aversion to the business world. That is why I didn't have any problems: I came from the business world, but I am obviously an example of a well spoken university graduate, and it is true that they have an easier time of it.

[Question] In my opinion your background is different from that of the PvdA. Max van den Berg fit perfectly into the party before he became chairman. As alderman in Groningen, he had already made the whole city inaccessible to cars. That clicked immediately with the congress.

[Answer] Perhaps I am the spokesman for a new PvdA culture.

[Question] Sorry, but you yourself do not believe that. At PvdA congresses they are forever fussing over unattainable matters. That cannot really appeal to a successful business woman from a multinational publishing company, can it?

[Answer] (Shifting even more dangerously to the point where the chair will tip over) Man, I have been running around with the party for 8 years now. If I felt that it was nothing, I would have been long gone!

[Question] So, you've been sitting there for 8 years now looking on...

[Answer] Of course, I do occasionally sit there looking...

[Question] But as chairman you have to pretend that you take it all serious-ly.

[Answer] All of it is serious. I really mean that. It is true that you can reduce the number of superfluous things by making sure that everybody receives good documents beforehand. You cannot settle the discussion with the knockdown argument that it is all nonsense. That two-minute-democracy: of course, that is really not possible, there are serious limits to it. One speaker after another says in 2 minutes what a whole series of speakers before him have already said. That is inherent in the way a congress works. Those people get to stand on the stage once a year.

One example. Once I attended a district meeting in Utrecht where someone addressed the meeting at great length about whether or not the government should take rat catchers in government service. It turned out later on that this person was working in the provincial government and was involved in it. Now that is not acceptable. All of that has little to do with political essentials. But it belongs to the party's culture.

#### Not Attainable

[Question] In terms of the economic dilemmas, there were people at the congress who wanted to see the introduction of a five hour workday within the next 10 years. Being a manager and an economist, that must make you wonder.

[Answer] I do feel that in such cases we must state clearly why this is not possible. I do take people who argue that sort of thing seriously, but that doesn't mean that I go along with them.

[Question] A nice way of saying: that is nonsense but I will listen anyway.

[Answer] Well now, you are trying to trick me into saying that it is all non-sense but I don't believe that and consequently I will not say it.

[Question] I don't want to trick you into anything, but what do you really think?

[Answer] The only thing is that a whole bunch of things are being formulated which are not attainable at the present time. But a little bit of imagination can exist, can't it? It is more serious when people threaten to give up their party membership because the 5 hour work day has not been settled yet. Then things become unhinged.

A little imagination is permissible, but you have to realize that with an electoral program you have to keep in mind whether it is even attainable, and whether it would be possible to negotiate the question with other parties.

[Question] Everybody at the congress is not clear on that, far from it.

[Answer] I admit that; yes, that is so. There is a tendency with the electoral program to reform the whole society and the whole world, instead of stating clearly what you would like to achieve in 4 years.

[Question] Why did you choose the PvdA then? Why not the PPR [Political Party of Radicals] or the D'66?

[Answer] Oh, definitely not the D'66. The PvdA was a logical extension of what I had been given at home. Moreover, it is important to me that the PvdA combines a reform spirit with striving toward the exercise of power. What I am interested in is power and the implementation of ideals. That is why I have never felt attracted to the small leftist parties. It is not only a question of formulating ideals. It must lead to something.

[Question] And the CDA?

[Answer] I don't like it very much. The party leaders are perhaps not too bad, but you experience the strangest things sometimes among the rank and file.

[Question] Such as?

[Answer] It is nearly too embarrassing to mention. But I attended a meeting of CDA youth. They were talking about minorities. Someone said: "Let us stop pulling each other's leg. After all, everyone knows that the Surinamese are too lazy to work." I really fell off my chair, not only because someone said that, but especially because nobody felt called upon to contradict it.

And then, of course, there are those stories about the family, and about women who after all belong at home. There are undoubtedly nice CDA members, but then I think: there is something wrong here. There were perhaps accidentally too many boys from Blaricum, but I prefer not to have too much to do with the CDA.

[Question] And with Van Mierlo's Blaricum youth? After all, as a yuppie you do belong with them, don't you?

[Answer] Oh dear. I hate that harping on my supposedly being a yuppie. I have a great deal of respect for Van Mierlo himself, but so far I have not been able to get a clear idea as to what party precisely he is the leader of.

What do they really think? I don't know. Everyone likes to see himself as the center of the world, but they believe it themselves. The D'66 does not have an image. For the PvdA thinking in terms of justice has been baked in, the refusal to accept injustice. It also has a great deal to do with myself. Not everyone is a fighter like I am. Not everyone can take such good care of himself. Not everyone makes it that far. I am very well aware that if I had not had so much stamina, I would not have made it. That it is not so much a matter of course that everyone can create a pleasant life for himself. That is indeed related to society, to your background, to the opportunties you get. I could have remained hanging in one place. With Schroevers. That is why I feel at home in the PvdA.

[Question] Where did you get that fighting spirit?

[Answer] It is in the family. My two sisters have it also. My father is a very strong person. To give you an example: when he was 80 years old he had a cerebral hemorrhage which left him unable to write with his right hand. At that age he taught himself to write lefthandedly. Both he and my mother come from poor circumstances. From large households. They learned to fight. And they have pumped that mentality into us. "There are no presents in life, nothing is free. And if you don't do it yourself, then you don't get anywhere."

The second interview. At the house which we agreed not to describe. "I have until half past two. After that I would like to be off on my Saturday off." A man of the house brought coffee. The man of the house?

[Answer] I am married, but I simply use my own name.

[Question] Does your husband also have a job?

[Answer] He is director of the organization of school support services.

[Question] But you use your own name as a matter of principle?

[Answer] Why not? I have already lived the major part of my life under the name Sint. When I got married I didn't see why I should stop that.

[Question] Soon you will be a well known Dutchman under that name.

[Answer] Yes, I suppose so. (Curiously) Will that be unpleasant?

[Question] Is your husband active in politics?

[Answer] He was a member of the PSP [Pacifist Socialist Party] leadership for 4 years. He knows very well what political work involves. But he left the PSP when the breakthrough failed. Now he is a member of the PvdA.

Up to Power

[Answer] My heart lies more with politics than with business. I enjoyed very much being a manager. But when the choice is: a move up to the Board of

Directors or up to politics, to power, then I choose the latter. That appeals more to me, and it is also unbelievably important. Politics touches the essence of people's existence. Politics determines the opportunities people will have. I find that more important than publishing newspapers. In and of itself I find that very pleasant and also extraordinarily fitting, but it does not have the same scope; its scope is much more narrow than that of political problems.

[Question] But there are a number of intermediate steps between what you are going to do now and not conducting politics. As a matter of fact, now you are suddenly jumping from the high board into the deep.

[Answer] I have never in my life had any trouble changing directions completely. When I felt the need for it, I went to the university to study economics; when I felt the need for it I left the government the start something completely different. I have job experience with the government, job experience in business, I have gotten political experience over the years. It is a nice combination. This is not an illogical continuation.

#### New Answers

[Question] It is the wrong time to become chairman of the PvdA with another 4 years in the opposition to look forward to.

[Answer] Or precisely a very favorable moment. Up to a point, the party is looking for ways to do better, and if we really are in the opposition for the next 4 years, then that discussion will not experience as much time pressure. We have to think about the program, about the strategy and about the organization. Three committees have been set up for that purpose.

[Question] Very nice, three committees. But how long have we been hearing, after every newly failed election or government formation, that the PvdA is going to come up with New Answers?

[Answer] You are wrong about that. There really is a feeling within the party that we have to come up with new answers for what is going on in society.

[Question] Undoubtedly, because for years now the PvdA beliefs have not led to a PvdA administration. It is true that after every failure a Strategy Committee is established. Following the fall of Cals/Vondeling it was the anti-KVP resolution. That didn't help. Then there was the shadow cabinet; that succeeded a little. Then there was the polarization via the controversial questions. Once again nothing. Then there was the New Realism. Did not lead to government service either. And now salvation is supposed to come from new answers and three committees. Would you mind if I am not too impressed?

[Answer] If you think that everything has to come from those three committees then you are right. Then I agree with you. But it is not like that. That is only the form in which new answers should be provided. I can clearly see in the party that it is not the hobby of a few individuals only. Thinking about new developments is alive in the party.

Where Do I Start?

[Question] But you did make a choice in favor of the PvdA because it was a question of power, didn't you? Then you have been wrong for years. You are going to be chairman of the lack of power party.

[Answer] That is not our fault alone, but certainly also that of the CDA. It must give us an opportunity.

[Question] Of course, but you know very well that at the present time the CDA will govern with the PvdA only if there really is no other way.

[Answer] Consequently, we must conduct a businesslike, substantial opposition. Show that we have better answers.

[Question] Just like with Lubbers-I then. At that time, we had Lubbers-II after the elections.

[Answer] We should not want to be indispensable only in terms of numbers; indispensability in terms of substance is at least equally important. We have to make sure that we do have answers to today's developments. But we must be able to make it clear that our ideas are better.

[Question] That sounds great, but the past years were basically ideal for socialists. Exploding unemployment figures, stagnating, even declining incomes, the scrapping of allowances. Things really could not have been any better. And who made the largest electoral profits by far: the party of Lubbers and Ruding. Could it be that the people don't really believe in your ideas?

[Answer] That is precisely what I am saying: we have to give new answers to the questions at hand.

[Question] Then you have a problem. Because: a 100,000 member party, of which 5,000 are active, has been unable to become indispensable to power for the last decades. Why would you suddenly get more seats now? Max van den Berg's departure may produce three more...

[Answer] That is what you say...

[Question] And with you there are also three seats more...

[Answer] (Blushing and laughing) That is your conclusion: those are your words. But you are right, it is extremely hard to get into power. I sometimes think: what am I getting into?

Part-time Work

[Question] Could you, to make it simple, give an example of an issue for which a new answer must be found?

[Answer] For example, whether you should start from individualization or from solidarity.

[Question] There precisely, in my opinion, lies your problem. Take labor distribution. The "new" PvdA supporters want a distribution by day in order to give everyone — men and women — a job opportunity and responsibility for the children. The "old" supporters want nothing to do with that. Early on in the discussions, Arnie Groeneveld shouted that he only wanted to talk about a free Friday afternoon for "his" people. His metal workers are not all that excited about shared responsibility for doing the dishes. People from the Schilderswijk are members, and so are the yuppies from the renovated warehouses. But they want quite different things.

[Answer] And I am supposed to turn that into a nice whole. Don't you see that those two are growing toward one another? At first, part-time work was taboo: everything had to be accomplished via a shortening of the workday. As early as 1980, the feminist Joke Smit told a congress of Red Women that part-time work was a path next to the general reduction of working hours. Now Wim Kok has hesitantly admitted in the House that perhaps part-time work should also be permitted.

### Younger Voters

[Question] That is nice, but that man from the Schilderswijk has long since been frightened out of his wits. He didn't want to do the dishes, and consequently he voted for Lubbers.

[Answer] It is true that noticeable trends were visible during the last elections. We lost relatively badly in a number of traditional strongholds. In the Rijnmond, for example, and in the Zaan region. It is — as yet — not a tragedy, but it does give one food for thought.

[Question] Precisely. You either keep the red women or the traditional workers.

[Answer] Based on the areas in which the losses took place you would think that. But it could also have something to do with the younger voters. Young voters helped Ed Nijpels achieve power in 1982. He was the first to have realized that the voters, and especially the younger voters, were looking for an optimistic story. No more fretting about the crisis, but a much happier story.

[Question] As far as missing trends is concerned, the PvdA has a name to maintain. When the crisis began, the PvdA felt that it was doubtful, and when many people saw the dawning of the light, the PvdA was still huddled in worries. When everyone noticed that cruise missiles were disappearing as an issue you made it into an electoral item. All of that is not very trend sensitive, not very smart.

[Answer] It so happens that we have the pretention of wanting to change everything, and thus we have a tendency to let ourselves be led by trends.

That way you rather run the risk of being stripped of everything. But it is true, you might wonder whether we have enough feel for the social climate. I also noted that during the months prior to the elections, attention to peace and security began to ebb away.

[Question] It was not noticeable in the campaign. As people could care less and less, Max van den Berg became increasingly more intense about the cruise missiles.

[Answer] (The designated chairman began to suppress a laugh.) I'm going to stay out of that one. But it was difficult suddenly to let go of that point. It had become a cornerstone of the policy and could no longer be reversed. Assuming that you would want to do that in the first place.

### Own Opinions

[Question] Will you, as party chairman, still have your own opinions in the future?

[Answer] Of course, but I will not propagate them as much.

[Question] Hence, things will be different than with Max who, for example, on his very own kept Van Kemenade from succeeding Den Uyl.

[Answer] (Silence) Look, I am of course a different person than Van den Berg. I am made up differently.

[Question] Let us assume that Wim Kok is run over by a tram and must be succeeded. The parliamentary party has a candidate, and the majority of the party leaders agree; would you consider it a possibility that behind the backs of all those people you would ensure that that candidate is dropped and made chairman of the board of a university?

[Answer] I can hardly imagine such a thing. Then things would really have to be very strange.

#### Greatly Overestimated

[Question] What do you really have to offer? The image of the PvdA is determined by economic subjects. The last few years have proven that the influence of Dutch policy on the Dutch economy is minimal. Duisenberg is conducting a policy which should lead to extra economic growth. But Germany and the United States are doing something different, and consequently something is going wrong with that growth. Lubbers comes up with a policy which — according to PvdA principles — will wreck the economy, and suddenly things are going in the right direction; because things are going well in the United States.

[Answer] You are right. We have overestimated the degree of our influence on the economy. Greatly overestimated it. We do, of course, have an influence on the distribution of prosperity. But we could hardly settle for the bare

facts, could we? There are 700,000 unemployed; we could hardly eliminate them from the political agenda. But I admit: we don't have any ready made solutions for that.

[Question] Falling off is enormous within the framework of the PvdA.

[Answer] There is a culture within the party which results in only the political diehards remaining, those people who are aiming for a professional political career. Our system is inadequate to train those who have talent but no spontaneous political ambitions themselves, for political work.

[Question] You seem to be a political diehard then.

[Answer] Not at all. But I am willing to put a great deal of energy into politics.

[Question] And make a political career.

[Answer] Not per se. I feel that politics is important. I am someone with a strong sense of norms. If I can do something, then I have to do it. Calling... Well, perhaps that is too heavy a word.

[Question] Properly Calvinistic for a socialist.

[Answer] Precisely. I fit the image of a Calvinist perfectly. My motives have a great deal to do with my sense of duty. "Whatever your hands find to do."

[Question] That is the Bible and not Marx.

[Answer] Be that as it may. I want to do things well, and not by half. When I take on a task, I do it well. It has to be that way. That is why I am always looking for new challenges. I never make things easy for myself. That is also very Calvinistic.

[Question] Party chairmen do sometimes want to become prime ministers.

[Answer] That happens, yes. But seldom among us.

[Question] Because you are hardly ever in the government.

[Answer] That is true. But you mean what I want, right?

[Question] Precisely.

[Answer] When a ministerial position opens up I will give that serious consideration. But perhaps I will refuse it then. I know myself well enough to know that I have never shrunk from changes in my career. So, who knows. Perhaps I will become minister, perhaps I'll start for myself. Everything is possible.

[Question] Given the tempo of your career becoming a minister is probably the least you can expect, and becoming the first female prime minister of the Netherlands would be more in line.

[Answer] Who knows. Once again: my motive is that I must do those things where my strength lies. I will not go against myself. I cannot have a comprehensive view of that now.

[Question] But if by that time Calvin were to feel that you can and should do it, then you would do it.

[Answer] Yes, who knows.

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CSO: 3614/34

POLITICAL PORTUGAL

POLL SHOWS POPULARITY OF GOVERNMENT, POLITICAL LEADERS

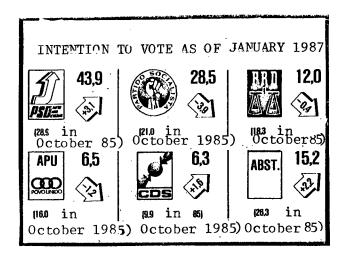
Lisbon EXPRESSO in Portuguese 17 Jan 87 pp 2-3

[Text] PSD Nears Absolute Majority

Winning practically 44 percent of the indications of intention to vote, the PSD has confirmed its earlier advance and is now on the borderline which would enable it to win an absolute majority of the seats in the parliament if elections were held. (It will be remembered that with the emergence of the PRD, the splintering of the vote by a larger number of intermediary parties served to make it easier for a party emerging clearly as the leader and with relatively uniform national support to capitalize on the votes obtained for a number of seats.) The PS remains the second element in a bipolarized electoral picture, but it is affected by a 4-point decline which eliminates any possibility of its vying with the Social Democrats for leadership.

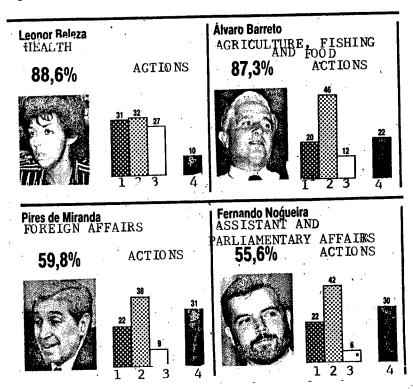
The variations, positive for the PSD and negative for the PS (almost balancing), represent the most significant factor in the voting intentions reported this month by the EXPRESSO-Euroexpansao panel. And the small decline for the PRD may confirm that the parties coming out publicly to suggest the development of a political crisis with a possible need for recourse to elections, as was the case with the renewal faction and the socialists in December, will prove to be those penalized the most by the voters. The voting intentions as currently expressed, show, moreover, that the PS has lost about 2 percent of its voters to the PSD, further reducing the percentage it succeeded in winning from earlier voters for the PRD and the APU. The PRD, in turn, shows a singular feature in that it only strengthened its electoral weight through the votes it obtains from the APU, showing a negative balance in the exchange with all the other party forces. But it still retains two thirds of the voters who gave it 18 percent of the votes on 6 October 1985.

The APU and the CDS again reflected the weak image characteristic of the parties located at the extremes in the party spectrum, in view of the tendency of the votes to polarize toward the parties with the greatest electoral strength. The minor weakening of the alliance led by the communists worked for the most part in favor of the PRD and the CDS, which showed a slight increase, benefiting in great part from the voting intentions of those who previously abstained, since once again some voters were lost to Cavaco Silva's party.

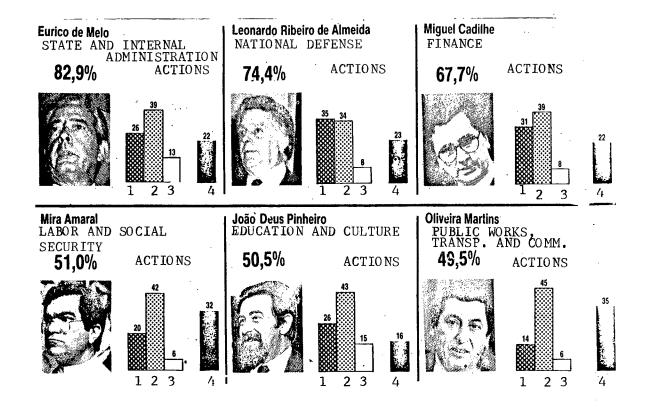


### Ten Best-Known Ministers

Minister of Health Leonor Beleza is the best known cabinet member, but also the one on whom opinions are most divided. Of those interviewed, 88.6 percent identified the head of the Ministry of Health, and 90 percent of them had an opinion about her actions. Naturally, the polemic actions of this minister divided the members of the panel profoundly, with those supporting her having a slight advantage (31 as compared to 27 percent). This is despite the fact that it is among the PS, PRD and APU voters that this minister is best known.



Key: 1 - Good; 2 - So-s0; 3 - Bad; 4 - Don't know.



Minister of Agriculture Alvaro Barreto came in second, but with a much lower percentage of positive responses--20 percent.

Curiously, it was Minister of Defense Leonardo Ribeiro de Almeida who won the most applause from the interviewees who said they knew who he was--35 percent. He is also the only minister except for Leonor Beleza to win a significant number of positive assessments from the opposition party voters.

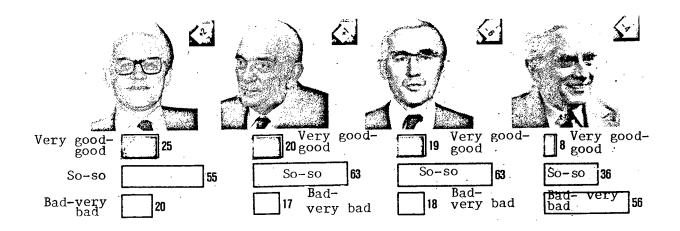
Of the 13 ministers, there are four whose names were not recognized by over half of those interviewed, and it is also curious to note that even Minister of Education Joao de Deus Pinheiro was only identified by 50.5 percent of them. Despite being the cabinet spokesman, Fernando Nogueira did not do much better, either--55.6 percent.

#### Eanes Less Popular Than Moreira

The first steps taken by Ramalho Eanes as a party leader seem to have been a disappointment to the voters. After the drop of 10 points he experienced in December, the president of the PRD could not even prevent the decline in his popularity from intensifying this month, when he lost 6 more points. It has been confirmed, then, that the high level of 35 percent achieved by Eanes in

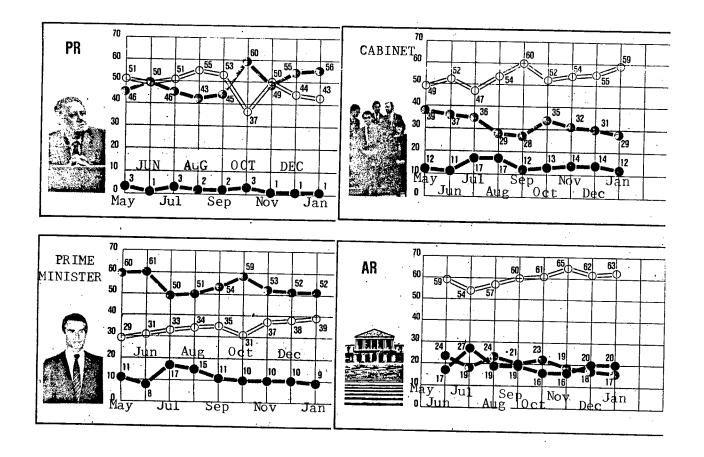
November just after his installation as the captain of the fate of the renewal faction was temporary and an aberration. In barely 2 months, he has lost 16 percent of this support, almost half of the favorable opinions he received then. It is further notable that this survey, made at the beginning of January, covers the political events in December, and in the case of Ramalho Eanes, this new drop in popularity may have to do with the political changes he imposed on the PRD, with the assertion of definite opposition to the government of Cavaco Silva and the proposal made to the PS concerning an agreement to create an alternative to a Social Democratic executive branch. The leader of the PRD is in a weakened position today, even below that of Adriano Moreira, and he proved to have greater support from the APU voters (31 percent) than the PRD itself (29 percent).

Vitor Constancio again ranked first among the opposition leaders, maintaining the trend of slow growth already seen in his popularity in December, in a recovery from the profound deterioration his image suffered in November. The almost unchanged position of Adriano Moreira, with a level very close to 20 percent, continues to be curious. It is basically among the central voters in the PSD, PS and PRD that he has obtained a stable percentage through the months, with unfavorable opinions at an even lower level than those the Christian Democratic voters expressed about their leader (22 percent of the centrists say his image is "bad" or "very bad"). There was an unusual variation of 4 points in the popularity of Alvaro Cunhal, for whom few changes are generally seen. The communist leader now has a popularity level very close to the intentions to vote attributed to the PCP.



Popularity of Cabinet, Assembly Down

Among our sovereign bodies of power, it is the cabinet and the Assembly of the Republic which have suffered a new deterioration in their public images, in a development in the opposite direction from that seen regularly for the president of the republic and the prime minister in the past 8 months, the time during which those interrogated have been asked about popularity.



The controversial Radio Law approved by the parliament and the price increases ordered by the government may have been factors with some influence on the decline in the popularity of the AR and the executive officers. These variations, although small, nonetheless made the trend toward a gradual decline in the favorable positions of each of these sovereign bodies clearer. The cabinet, a far cry from the popularity of its prime minister, is now below the 30 percent level, with the positive assessment reduced to 17 points despite the statements of solidarity and confidence made by Cavaco Silva about the various ministers and the cabinet as a team. The Assembly of the Republic is in its now usual last place, with a negative balance of 3 points. It is probable that its public image reflects the fact that it is in this body that the main political clashes have occurred, dividing public opinion and making that body appear to be the center of party and institutional conflicts.

Cavaco Silva remains solidly above the 50 percent level, 4 points away from the PR, passing with his popularity almost unscathed through the obstacles and difficulties with which political and government activity have faced him. This position stands out the more clearly when compared with the mediocre image of his cabinet.

5157 CSO:3542/45 POLITICAL PORTUGAL

#### TACTICAL ERRORS OF OPPOSITION CRITICIZED

Lisbon EXPRESSO in Portuguese 17 Jan 87 p 3

[Article by Jose Antonio Saraiva: "Is the Opposition Afraid?"]

[Text] For a number of years, the majority of Portuguese citizens have shared the following idea—the country needs urgent measures its governments are not capable of implementing them.

The reasons suggested for the chronic ineptitude of the government have been various, ranging from a lack of decision-making capacity to the private interests of the parties which make up the executive body.

This situation has changed radically today, and those who cannot understand it must cease to assess the political phenomenon.

The executive branch headed by Cavaco Silva was able to send to the majority of the people a simplistic message which can be summarized as follows.

First, the government is efficient, competent and determined.

Second, the government does not act as a function of party interests, but rather the national interests.

Third, the government adopts the measures the country needs, but the opposition does not let it implement them.

In this way the government, which before the present executive branch took office appeared to be to blame for the fact that the country was not advancing, emerges today in the victim's role, with the opposition represented as the main agent responsible for the problems which remain to be resolved.

Let us state that in Portugal, a veritable exchange of roles has occurred.

This explains the fact that the party of the prime minister emerges from all of the polls with a very high percentage, and the parties in the parliamentary opposition merely maintain their levels, or see them drop.

We are thus led to conclude that the opposition has adopted an erroneous strategy with regard to Cavaco Silva's government.

The leftist opposition is persuaded that the best way to react to the aggressive policy of this executive branch would be to prove, in practice, that it has neither the power nor the resources to carry its measures forward.

To the flood of documents drafted by the government, the opposition has responded with stubborn rejection.

The parties in the parliamentary opposition thought that by this type of action, Cavaco Silva could be forced either to retreat, agreeing to negotiate with them, or to resign, recognizing that the fact that his government is a minority one has made it impossible for it to implement its measures.

Obviously, neither the one thing nor the other has come about.

The shot the opposition had planned has backfired.

And this was because, given a government with the capacity to persuade and convince which this one has revealed, there is only one possible strategy for the opposition. That is to allow it to govern, in the conviction that if it were to implement the measures it has proposed fully, it would inevitably govern badly and would in the end disappoint its most faithful defenders.

In popular terms, the opposition should have let the government "go out on a limb," extracting the benefits therefrom and giving it no pretext on which to justify failure.

By doing the contrary, the leftist opposition has exposed itself and made itself vulnerable to a campaign to which it will now have difficulty in responding.

In truth, the idea which many Portuguese citizens have in their heads today is this.

The parliament is not allowing the government to govern because the parties of the left know that if the government were to govern as it wants and without hindrance, it would govern well.

In other words, the parliament is afraid of the efficiency of Cavaco Silva's cabinet.

How will the opposition respond to this? And how will it prove that the executive governed badly if, on many occasions, it has not allowed it to do what it proposed to do?

5157 CSO:3542/45 POLITICAL PORTUGAL

INCREASED TENDENCY IN PS TOWARD ALLIANCE WITH PRD

Lisbon O JORNAL in Portuguese 30 Jan-5 Feb 87 p 8

[Article by H.M.: "Proposed Alliance With PRD Wins Supporters in PS"; first paragraph is O JORNAL introduction]

[Text] The idea that the PS should unseat the government and sponsor an alliance with the PRD in the context of the current parliament is winning supporters at the highest levels of the Socialist Party. Constancio and his closest associates, however, remain opposed to the idea.

As O JORNAL reported at the time, Sottomayor Cardia and Manuel Alegre were the principal proponents of immediate collaboration with the PRD [Democratic Renewal Party] in order to provide an alternative to Cavaco Silva.

In addition to these two party leaders, European deputy Luis Filipe Madeira-concurrently a member of the secretariat and "shadow minister" for internal administration--had already put forward the idea as a short-term plan. Torres Couto, secretary-general of the UGT [General Union of Workers] and also a member of the secretariat, is another who is said to view this solution favorably.

The hypothesis of a coalition between socialists and "renewalists" within the structure of the current parliament has been advocated recently by General Eanes. The renewalists even let it be known in socialist circles that their leader would not be interested in participating in such a government. They said they would be especially interested in the areas of social communication and the economy, for which they proposed the candidacy of Silva Lopes.

The arguments used by those in the PS who advocate this solution are having some impact within the party. Essentially, their arguments are based on the fact that the economic indicators are pointing toward a less favorable outlook for the Portuguese economy in the coming year—a circumstance that would suggest an urgent need for a return of the Left to power.

At the same time, these party leaders maintain that any election would result in a clear and irrevocable victory for Cavaco Silva. They fear the outcome would be an absolute majority for the PSD, or at least for a PSD-CDS coalition.

#### Constancio Favors Elections

PS Secretary-General Vitor Constancio has shown himself not to be in agreement with this thesis. The socialist leader--who is supported on this issue by the two members of the secretariat who are regarded as his principal advisers, Jorge Sampaio and Nuno Brederode Santos--maintains that since the party congress he has argued that it would be "desirable" for the PS to take the reins of government again only "after elections are held."

Constancio--and the others who do not agree that there should be an immediate coalition with the PRD--believe that in such case the PS would wind up in the arms of the PCP, inasmuch as the votes of the renewalists combined with those of the socialists are fewer than the combined votes of the PSD and CDS. On the other hand, with General Eanes outside the government--and the dependence on the PCP in Parliament--the PS would fall in the event of an understanding between the PRD and PCP.

There is still another consideration: the fact that the fall of the government could perhaps have negative consequences for whoever had provoked it. In the event of a crisis, the socialist leader might prefer to have the government bring it upon itself.

Within the "shadow cabinet," the position of the advocates of a coalition with the PRD is weaker, both because the minority members—Jaime Gama and Miranda Calha—are also opposed to this solution and because other members who are close to Constancio (Vera Jardim and Joao Cravinho, among others) agree with the party leader on this issue.

The subject came up at the recent meeting of the "shadow cabinet," held in Sintra, and two major options were reportedly established. On one side are those who advocate a coalition with the PRD and the fall of the government, to be provoked by the PS in the near future; and on the other, those who maintain that the PS ought not--for the present--provoke a crisis and that the party should return to power only after elections are held.

The strategic question before the PS is: Should the party adopt a policy of winning the support of the Center, or is its primary objective to regain the votes it lost at the most recent elections? The majority of the PS leaders believe the party should regain the voters it lost to the PRD, as a prerequisite for competing with the PRD for the support of the political Center. This discussion—which is not calm in tone—has given rise to a polemic with certain sectors of the minority. These sectors allege that the policy the PS is following is alienating moderate voters.

#### Minority To Meet

The situation among the members of the minority is not very clear. In fact, the minority leader Jaime Gama continues to be challenged by more radical sectors of the party, who accuse him of having virtually resigned from the organized opposition to the party leadership. Some sectors of the minority want to meet early in February to study a strategy. Yesterday (Thursday) one

weekly publication put forward the name of Almeida Santos for the post, although it added that he would probably not be motivated to accept it. Moreover, some of the members who are closest to Gama say that the most radical sectors of the party want to push the minority leader into an irreversible strategy. They argue that it is necessary to give the new minority leadership time, and not to accept arguments that would make scapegoats of the members of the minority for any future failure by the party.

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CSO: 3542/52

POLITICAL PORTUGAL

#### BRIEFS

PCP DIFFICULTIES—The PCP leadership is meeting with difficulties in its reaction to the requests by militants (and cells) for a debate on events in the USSR. The fact is that Gorbachev's "liberalization" is showing to many people that the "gulags" were not an invention of the reactionary forces and that the "sun of the world" was indeed overcast. Moreover, there are some who are asking for the "Gorbachevization" of Albaro Cunhal's party and who are accusing O DIARIO and AVANTE of censoring information related to events in the Soviet Union and Afghanistan. These activities may portend that the Cunhal followers will possibly trip on the stairs of their glass edifice which may very well begin to crack. [Text] [Lisbon O DIABO in Portuguese 17 Feb 87 p 2] /8309

CSO: 3542/61

POLITICAL TURKEY

EFFECT OF IRAN-CONTRA AFFAIR ON TIES WITH U.S. EXAMINED

Istanbul MILLIYET in Turkish 15 Dec 86 p 10

[Article by Talat Halman: "The United States, We and Others"]

[Text] "Defrauded by a friend": The U.S-Turkish Defense and Economic Cooperation Agreement was initialed a few days ago. Ankara and Washington will now review the terms of the agreement one more time, and the accord will probably be ratified and go into effect soon following minor modifications over formalities. Officials have not yet disclosed the terms of the agreement. Because Turkey is once again being "defrauded by a friend." While our country is a most important and indispensible ally in terms of its strategic location, military strength and loyalty to the Western defense system, the "friendly and brotherly" United States keeps defrauding and exploiting us. The U.S. aid we have reluctantly agreed to for 1987 amounts to the ridiculous sum of \$590 million. In return, the United States will keep its massive bases--which it has described as crucial for its own defense--and military presence on our Thanks to these bases, the United States not only is able to fortify its defense line against the Soviet Union in conjunction with our forces, gains benefits it considers very important such as protecting Israel, threatening Iran and intimidating Syria and Iraq.

We naturally gained advantages from 40 years of U.S.-Turkish cooperation. But the gains of the United States have been incalculably greater than our own. The latest agreement is a "bargain" for the United States and a "disgrace" for us. We were badly swindled. Many Americans realize that. It was not for nothing that Assistant Secretary of Defense Richard Perle said in Ankara: "This was an almost exceptionally bad year for Turkey. But future years may be almost exceptionally good."

Mr Perle apparently expects us to smile when we are offered cash. But we cannot smile when our government is so impotent and sluggish before Washington and when it suffers such a severe defeat in the defense of our national interests. What a pity! What a shame!

"American cowboys": When we were children there was a song that went "American cowboys are like lions." For the last 6 years Reagan, whose personality has occasionally been described as a "cowboy's," was liked and praised as "lion-like cowboy" in the United States and many other countries. Judging from elections, opinion polls and the Congress' acquiescence to every

wish of Reagan's, the "cowboy" was indeed the most "popular" U.S. president in the 20th century. According to an opinion poll taken a few days prior to the surfacing of the Iran-Contra scandal, 67 percent of the American people approved Reagan's performance. This approval rating dropped to 46 percent within a month. (This is the first time in America that such a decline has been observed over such short period of time.) One of Reagan's most praised attributes was his image of "an honest man," "a leader who speaks with candor and always tells the truth" and "a decent leader who does not get involved in secret deals." Now according to the same PIAR [Market Research Center] poll, more than half the people call him a "liar."

A few months ago, Isuzu began running an interesting commercial on American television. In the commercial, a fast-talking salesman makes exaggerated claims such as "our cars go so fast, are so safe and will last so long." While he talks an inscription appears on the screen saying "do not believe him, he is lying." Then a second salesman appears and praises his product with the same exaggerations, and the inscription says: "Do not believe him, he is lying." President Reagan's recent speeches on television were a little like that. While he was talking, it was as if an inscription on the screen said: "Do not believe him, he is lying."

Reagan had also won our affection and respect from miles away. At the moment it is hard to guess what our blindly pro-American government thinks about Reagan now. But what do our people think? At the minimum we must not forget the following: Is it not possible that a president who lies to his own nation could have lied on diplomatic, military and economic cooperation issues that concern us? When the U.S.-Turkish agreement was initialed a few days ago, perhaps we descended into a well with a liar's rope.

"Kashoggi the profiteer": The Iran-Contra affair severely shook Reagan, cost many officials their jobs and will cause several other heads to roll. But there are people who profited from the same incident. Most prominent among them is Saudi arms merchant Adnan Kashoggi. He says that he "lost \$10 million from the sale of arms to Iran." But he adds: "What is a shipment of \$35-million worth of arms? It is just a drop in the ocean. We embarked on this venture with the hope that we would sell billions of dollars worth of arms to Iran." Regardless of how the scandal in the U.S. ends, Kashoggi will sell billions of dollars worth of arms to Iran. For some reason, the "merchants of death" make a profit every time everywhere.

Colonel North, one of the architects of this scandal, will also gain though on a smaller scale. He lost his job at the White House, but several newspapers, magazines and publishing houses have offered large sums of money to buy rights to his memoirs. A film company reportedly offered \$500,000 to make a movie about North's story. In addition, many Americans are praising Colonel North as a "patriot."

That is the way it is, dear readers. Sometimes the bad win and the good lose. Was that not the case in the U.S.-Turkish agreement? Washington profited at our expense.

9588

CSO: 3554/137

POLITICAL TURKEY

OZAL SAID TO BE RUNNING SHORT ON TIME

Istanbul DUNYA in Turkish 15 Dec 86 p 1

[Editorial: "The 2 Years the Government Has"]

[Text] As the Motherland Party [MP] government completes its third year in office, it has reached a significant point in time to evaluate its past performance. Now the government has less time than what it has spent in its bid to improve Turkey's condition and to fulfill its promises. Moreover, it is customary to judge governments not by their successes but by their failures.

During the time it has been in office the MP government, or more accurately the Ozal government, has introduced many programs that are definitely new in Turkey. However, it is quite disputable how well these programs have responded to objective conditions and the citizens' expectations which were constantly and directly raised by declarations made by government spokesmen. If such a debate is restricted to economic developments, two criteria may be used to evaluate the government's performance. The first of these criteria is the economic progress Turkey has made in the last 3 years.

The statistics of the last 3 years indicate that positive developments have occurred in production and investments, the domestic and the foreign debt has grown, and the country's balance of payments has improved. However, as Prime Minister Turgut Ozal indicated in his most recent press conference, economic experts and the public have doubts about the issue of inflation, which is the economy's principal problem. The process of cutting inflation, which has been proven to be feasible by "shock treatment" type implementations in many countries, has taken too long in Turkey and will apparently take even longer. In this regard, the government sees its status of being an elected government as a disadvantage. On this issue, the Ozal government has failed to utilize in time the advantages of "being elected to office." Perhaps, it has failed to do so out of making the wrong choices.

The second criteria in the evaluation of the government's performance in the past 3 years may be the degree of fulfillment of official promises. In this respect, some of the provisions of the government program, read by Ozal at the Turkish Grand National Assembly on 19 December 1983, carry special significance:

"--Interventionism, whose final cost is always born by the low and fixed-income groups, will be avoided. The transition to economic policies emphasizing free determination of property, money and foreign currency prices will be expedited.

"--We believe that the creation of a strong and healthy stock market is essential for Turkey.

"--In order to derive maximum benefit from available resources it extremely important to allocate credit to high-yield projects rather than distributing credit within a system based on excessive security.

"--Full currency convertibility will be achieved during the government's term of office."

Given that foreign exchange rates and interest rates continue to be set by government authorities, that arrangements have still not been made for the establishment of the profession of licensed financial auditing which will provide independent supervision of companies—a practice that is indispensible for the strengthening of a sound capital system—and that the importance of real estate mortgages streadily growing in credit collaterals, it is seen that the government does not have much time left. The government's promise on convertibility with all is prerequisites must also not be forgotten.

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CSO: 3554/137

POLITICAL

INTERVIEW WITH FORMER PRIME MINISTER DEMIREL

Istanbul TERCUMAN in Turkish 15 Dec 86 p 8

[Interview with former Prime Minister Suleyman Demirel by correspondent Kurtul Altug in Ankara; date not given]

[Text] Suleyman Demirel, former prime minister and leader of the defunct Justice Party, spoke to TERCUMAN about issues on Turkey's political agenda. He said: "Trying to use Article 175 in order to abolish Provisional Article 4 of the Constitution is only a pretext. They would not take that course if they were serious. They are not serious about repealing Provisional Article 4."

Demirel also spoke about the debate over reactionarism in Turkey and said:

"The government does not complain; it does not make vague declarations. Who are the perpetrators of the phenomenon we call reactionarism? If the government knows who they are and is not taking any legal action, then it is committing a grave error."

Demirel's answers to TERCUMAN's questions were as follows:

On Provisional Article 4

Question: As you know, one of the leading issues on Turkey's agenda is the new development with regard to Provisional Article 4 [of the Constitution]. During the discussion of the budget in the Assembly, the Prime Minister said: "If a consensus is reached over the amendment of Article 175, then I will have Provisional Article 4 repealed."

This new development is undoubtedly of utmost interest to you and to former political leaders in your position. What are your views on this issue?

Demirel: First, let me say this: The issue of whether Provisional Article 4 is repealed or not is not my personal problem. Provisional Article 4 is the shame of the current regime in Turkey. It is a violation of human rights. Those governing Turkey today have spoken eloquently on the anniversary of the human rights convention, but they have before them a blatant example of a human rights violation. Provisional Article 4 is a violation of justice, law and equality of justice. It is a poignant example of unfairness, injustice

and inequality. We have before us a situation which is unbefitting for any state and which may harm Turkey. In fact, it is harming Turkey. One of the basic elements of Provisional Article 4 is the insecurity it has brought into Turkish politics and among Turkish politicians. The system in Turkey cannot work as long as this article hangs over Turkish politics and politicians like a Damocles' sword. When one looks at Turkey's situation today, one cannot say that the system is working.

Nearly 150 of the deputies elected to the TGNA [Turkish Grand National Assembly] on 6 November [1983] have changed their party affiliation. This party has ceased to exist. The only reason the government party exists today is because it is in the government. If this party was not in the government it would disband before the others. Provisional Article 4 has rendered politics meaningless. Turkey will remain in crisis as long as it cannot have security for its politics and politicians.

Should Provisional Article 4 Be Repealed?

Question: How will this conflict be resolved in your opinion? In other words, will this debate continue forever?

Demirel: With regard to the question of whether Provisional Article 4 must be repealed, I say from my vantage point that if this article is indispensible for Turkey then let it stay for another year. One might argue that if competent and experienced cadres are driven away from office new cadres may replace them. But Turkey would lose a lot during the time these new cadres gain competence and experience. In addition, no one came and took office by force in Turkey. This ban is not just a ban on the old cadres; it bars people from electing the individuals and cadres they want to elect. To put it bluntly, this is a ban on choice.

Turkey would breathe easier if this article is abolished without delay. Since those who formulated this article are also saying that they are "not opposed to the repeal of the article," how can those who oppose its repeal defend this article? If they try to defend it, then the debate will assume much bigger proportions. That would be virtual hostility. You are not the one who has a vested interest. Then why are you opposing it? There can only be one reason: "We will not allow the familiar cadres to survive in Turkey." But who are you? "We are a group of individuals who control the government." No one can defend such a stand.

Question: In any case, nobody is saying that "Provisional Article 4 should not be repealed." At least I believe that there is no such open opposition.

Demirel: No, nobody is saying "let us not repeal it," but steps taken toward repealing the article are being blocked. Rather than helping such a movement, they are blocking it. That means "we do not consent to the repeal of the article." I say to those who do not consent to the repeal of the article: This is a declaration of hostility by those who oppose the country's right of choosing against those who defend that right. Those who are challenged by this declaration of hostility will have to accept it. A right of self-defense

will obviously arise. These oppressed, innocent and modest individuals and delegations will thus regain their right to defend their law and the law of the nation together.

If those who govern Turkey today are serious about repealing Provisional Article 4, then they have no need to point to their right ear with their left hand.

In truth, there is a sufficient majority of votes in this Assembly to amend Provisional Article 4. Since 134 deputies have signed, only 133 more signatures are needed.

Question: The Prime Minister has asked for a consensus over the amendment of Article 175 as a necessary condition, if not as a precondition. What is your evaluation of the relationship between these two articles?

Provisional Article 4 and Article 175

Demirel: Since you have the majority of votes needed to amend Article 175, then why are you not amending Provisional Article 4? Are you implying that Article 175 will help you find the majority of votes needed to amend Provisional Article 4?

Question: What do you attribute this posture to?

Demirel: This is a pretext. They would not take that course if they were serious. They are not serious about repealing Provisional Article 4. If they want to amend the provisional article, then it is meaningless to link it to Article 175. Provisional Article 4 is a completely separate issue. There is no sense in trying to amend Article 175 in order to amend Provisional Article 4. This is nothing but a pretext.

Turkey is agonizing in problems. There cannot be system of banned and permitted politicians. A debate over another election with bans would incur a heavy cost on Turkey.

Bankruptcies and Figures in Economy

Question: This political uneasiness is apparently reflected in the economy. There are growing complaints from business circles. Bankruptcies are growing, and workers are dissatisfied. As a person who has governed Turkey for many years, can you evaluate this situation?

Demirel: If the economy is managed well, it will produce prosperity, growth and fewer malfunctions. Bankruptcies and discontent occur in all economies. But if bankruptcies and discontent are widespread and begin causing a virtual panic in the country, that is not an indication of a well-governed country. If a patient's fever rises and does not drop, it is not an indication of good health. It is not enough to say "let those who cannot manage sink." If some people did well 3 years ago and cannot manage to stay in business today, it is not enough to say: "They were clever yesterday, but today they cannot run

their business." These are not good indications. Nor are they indications of success. You cannot keep a record of your accomplishments by saying "I sank so many people."

Question: You referred to economic growth just a minute ago. The government has declared that the economic growth rate is as high as 7.8 percent.

Demirel: If the growth rate is 7.8 percent, then that is very good. But that figure is disputed. If agricultural output has grown by 7.8 percent we must However, if agricultural output grew by 7.8 percent, the be happy about it. country should have produced 19 million metric tons of wheat. If 19 million metric tons of wheat exists, then where is it? Turkey uses 14 million metric Turkey consumes 225 kilograms of wheat tons for food, seed and animal feed. Turkey needs 14 million metric tons of wheat a year. per person per year. There should be surplus of 5 million metric tons. Where is the rest? year, the wheat crop was declared to be 17 million metric tons, which means that there should have been a surplus of 3 million metric tons. This means that today we should have a surplus of 8 million metric tons. Where is this Many people are asking this question. No one has yet found an If there was truly a growth of 7.8 percent, where is the explanation. evidence?

The general impression is that people are growing poorer every year. If you ask me how I know this, listen to the voices coming out of the congresses of labor unions. The workers have declared the present government as "antiworker." When you talk to the farmer, he is on the verge of selling or defaulting on the tractor he has bought with much sacrifice. Where is the evidence of growth?

Is There a Peril of Reactionarism in Turkey?

Question: Another major issue is the controversy over reactionarism in Turkey. The Chief of the General Staff issued a circular to the armed forces on this matter. The President has occasionally broached this issue. In your opinion, is there a peril of reactionarism?

Demirel: This is nothing new. A debate is held three or four times every year over reactionarism. The manner of the debates imply uneasiness over religion and religious behavior. In Turkey, 99.9 percent of the population is Muslim. I believe that a form of debate which annoys Muslims is unnecessary. Such debates are unwarranted. The laws of the Turkish Republic do not refer to any offense called "reactionarism." On the contrary, the Constitution and the laws of the country guarantee freedom of religion and faith. "We have nothing against religious people. We are objecting to those who go beyond that." But when you say "those who go beyond" you are saying it in a way that annoys religious people. Engaging in such obscure debates over the people of a Muslim country and exerting pressures on them prevents people from exercising their rights. Turkey must rid itself of the mentality that if people exercise their rights Turkey would be disturbed.

What if the rights are exercised in the wrong manner? If they are, then we have a government which can hold the wrongdoers accountable. The government

does not complain; it does not make vague declarations. Who are the perpetrators of the phenomenon we call reactionarism? Who is giving the orders? Does not the government know who they are? If you know and you are not prosecuting them through legal channels and you are making declarations which hold all Muslim and religious people responsible for an offense, then I would condemn such a stance.

The debates must take place on legal foundations. Since the day the republic was established, the people have been told about a peril called reactionarism. But we have the declaration of the 12 September 1980 intervention. The organizations and individuals included in that declaration were taken to court and were acquitted. Rather than declaring a peril of reactionarism every so often, the nation must be told what these people are planning to do. Is the government capable of doing that? In my opinion, these debates must be set on the right track.

There are circles who are pleased with these debates. With what I am saying now I am not trying to sanction a criminal offense. As long as the fear of the solitary monk is not overcome in Turkey, we will have problems in exercising our freedom of religion and faith. Linking any remarks about religion with reactionarism is extremely wrong. Because at the time the Turkish Republic was established, the 1924 Constitution said: "The religion of the Turkish state is Islam." That is how it was from 1928 through 1932. We should not compromise on Article 24 of the Constitution on freedom of religion and faith in our eagerness to preserve secularism. If there are acts in a gray area which the laws do not consider as criminal and you consider them as offenses, then that is wrong. That would be a "disputed offense."

On the other hand, if there are acts in a gray area which the laws do consider criminal, and rather than pursuing and prosecuting the offenders you are causing panic and alarm by making declarations, then that is also wrong. Such a posture helps the wrongdoers and annoys the righteous.

If there are fears that a Khomeyni-style regime may be set up in Turkey, then that means that there are doubts about the common sense of Turkey's citizens, their adherence to Islam and their patriotism. You are the government. Everything is in your hands. What and who are these entities you call "sources of reactionarism"? How big are they and what do they want to do? Do you not know these? When it is possible neutralize them, do not annoy the nation with declarations. My remarks are addressed to everyone.

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POLITICAL TURKEY

COMMENTARY SEES CHANGE IN NATURE OF GULF WAR

Istanbul CUMHURIYET in Turkish 15 Dec 86 p 3

["Problems in Politics" column by Ergun Balci: "War of Economic Destruction"]

[Text] The Gulf War, in which neither side has been able to gain military advantage on the battlefront, recently changed character and turned into an economic war. Iraq is seen to have the upper hand in the economic war. Having failed to drive back Iranian divisions on land, Iraq is using its superiority in air power to wage an economic war against Iran. In this war, which has escalated steadily since mid-summer, Iraq has scored success and Iran has suffered heavy losses. In the last 6 months Iraq has regularly bombed Iran's steel plants, aluminum factories, oil refineries, petrochemical installations, power plants, railroads and oil terminals. Iraq's objective is to destroy Iran's economic infrastructure to make the continuation of the war impossible for Tehran and to force it to sit at the negotiating table.

A major development in this war of economic destruction is the fact that Iraq has attained the capability to strike Iranian oil terminals in any part of the Gulf by refueling its planes in the air.

Iran moved its oil export facilities to the islands of Sirri and Larak at the southern end of the Gulf in order to evade Iraqi airplanes which have bombed the oil terminal at Kharg Island virtually every day. Tehran hoped that this way its oil terminals would remain outside the range of Iraqi jets. Iraq bombed Sirri in August and Larak on 25 November by refueling its Mirage Both bombing raids are extremely important because Iran bombers in the air. Iraq is thus capable of has been financing the war solely with oil revenues. striking at Iran's lifeline at every corner of the Gulf. While Iran's oil output dropped by 10 percent in 1986 because of the bombing raids, during the same period Iraq, which exports its oil via pipelines through Saudi Arabia and increased its output by 30 percent. The magazine L'EXPRESS reports that Iran's oil output declined by 200,000 barrels a day in the last week of November and dropped to below 1 million barrels a day for the first time in a long time. Iran's oil revenues for 1986 will reportedly total only \$7 billion in 1986, representing a decline of 40 percent over last year.

Meanwhile, both countries have stepped up their attacks against oil tankers passing through the Gulf. In 1986, nearly 100 vessels were attacked in the Gulf, compared to a total of 150 ships in the previous 5 years.

Lacking a powerful air force, Iran cannot do anything at present to counter Iraq's war of economic destruction except firing missiles into Baghdad and shelling Basra with artillery fire.

Assuming that Iran will not sit at the negotiating table as long as Khomeyni is alive, Iran has three options:

--To strike a fatal blow against Iraq by launching a final offensive and thus to end this war which is destroying its economic infrastructure. However, Iran has still not been able to mount its "final offensive." Some observers attribute this to the heavy damage Iraqi air raids have caused to Iran's railroads, power plants and transportation system. Others claim that Iran is waiting for the onset of really bad weather to mount its offensive. Iran's offensive would have a better chance of success if Iraq's air forces was debilitated by bad weather.

--Iran's second option is to attack ships bound for Iraq in reprisal for Iraqi raids and thus to intimidate the Arab Gulf countries that are helping Baghdad. The bombing of an offshore oil platform off the coast of Abu Dhabi is significant from this perspective. The British-Omanian joint military maneuvers which began in Oman 10 days ago are also significant at a time when Iran has stepped up its attacks on ships sailing in the southern end of the Gulf.

--Iran's third option is of vital interest to Turkey. Tehran may contemplate to bomb Iraq's lifeline, that is its pipeline through Turkey. In this regard it is useful to mention growing rumors that the Barzani and Talabani forces have been preparing for a major assault on Kirkuk in recent days.

We believe that no matter what happens Iran will have to make recourse to one of these three options. Because Iraq's air raids are opening deep wounds in its economy.

The  $\operatorname{Gulf}$  war is apparently pregnant with new explosions which may be of vital interest to  $\operatorname{Turkey}$ .

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POLITICAL TURKEY

EFFORTS TO FORM SOCIALIST PARTY

Istanbul MILLIYET in Turkish 15 Dec 86 p 8

[Ayda Ozlu report]

[Text] Mehmet Ali Aybar, a former leader of the Turkish Labor Party and the Socialist Revolution Party, disclosed that the stage to form the United Socialist Party has been reached. A four-member commission has been formed to evaluate proposals with regard to the party's program and bylaws.

Insisting that only the socialists have remained loyal to Turkey's war of indepedence and Ataturk's concept of full independence, Aybar said: "The social system Ataturk defined without giving it a name was socialism."

The second exploratory meeting in connection with ongoing work to form the United Socialist Party was held in Istanbul yesterday. The meeting which was opened by a speech by Mehmet Ali Aybar aroused interest among young people in particular. Yalcin Kucuk, who participated in previous debates, disclosed at yesterday's meeting that he will not take part in the socialist party to be formed. The decision not to take part in the party by intellectuals such as Murat Belge and Ugur Mumcu, who also participated in previous discussions, was interpreted as "nothing but a compromise between the Turkish Workers' and Peasants' Party and the Revolutionary Socialist Party." By saying that "a union between Aybar and Perincek will not be enough to form a socialist party," Kucuk indicated that the party to be formed will not encompass the entire socialist segment.

Aybar's Speech

Mehmet Ali Aybar, the chairman of the Invitation Committee which organized yesterday's meeting, began his opening speech by enumerating the difficulties before the formation of a socialist party. Stating that the power of capitalism and imperialism in the world must not be overlooked, Aybar said: "All difficulties notwithstanding, we will establish a socialist party in Turkey which is the forward sentry post of American imperialism."

Aybar later said in summary:

"We will establish socialism in a country like Turkey which fought the world's first national liberation war against imperialism. Today, nobody except the

socialists remain faithful to that war. Today, no one wants to talk about the 'full independence' Ataturk wanted to achieve. The social system Ataturk defined after the war of independence without giving it a name was socialism. His words were knowingly or unknowingly inspired by socialist philosophy which is based on labor. But no steps were taken in that direction."

Aybar insisted that Islam is incompatible with democracy and that the Islamic religion is a totalitarian philosophy. He added: "In that religion, a leader is both a political and a religious leader. There is only one truth. If those who want to establish an Islamic system claim that they respect democracy, they are disrespecting themselves. Islam has no room for freedom of thought; it wants the implementation of Islamic law." Aybar said that these groups will also try to block their efforts to form a socialist party.

Yalcin Kucuk, who spoke at the meeting and who disclosed that he will not serve in the socialist party to be formed, said in summary:

"While the union between Aybar and Perincek is significant, it is evident that that will not be sufficient to form a socialist party. It is clear that one cannot contribute to the formation of a socialist party with the mentality and attitude of an old maid."

Kucuk enumerated the various factions that emerged in the course of party organization activities over the last year as follows: "The party to prevent the formation of a socialist party, the party of the people downstairs, the caravanserai party, the party of rejection of progress."

### Four-member Commission

After 60 people expressed their views on the formation of a socialist party, Founding Council President Ibrahim Cetin declared that in accordance with a proposal submitted to the Founding Council a commission has been established consisting of Yalcin Buyukdagli, Dogan Ekmekcioglu, Huseyin Imik and Erol Toy. The commission will take over the functions of the communications committee which has run the party organization work since 15 June. The commission will also evaluate "application forms for the establishment of a socialist party" which were handed out before the meeting. The forms will identify those who want to serve on founding, bylaws and program commissions.

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POLITICAL

# YOUTH SEEN RETURNING TO ACTIVISM

Istanbul MILLIYET in Turkish (BAKIS Magazine) 2-8 Nov 86 p 29

[Text] When Isa Tanriverdi, a 3d year law student at Marmara University, was expelled from school for failing to pass a course he had failed in his first year, he decided to commit suicide. The 23-year-old student's body was found hanging from the ceiling of a bathroom at the Altunizade Student Hostel where Tanriverdi was staying.

To protest the death of their colleague, about 500 students tried to place a black wreath before Marmara University's administration building in Sultanahmet. However, they were prevented from doing so by security forces. Two students carrying the wreath incribed with "end to injustice" were taken into custody.

Sevket Tanriverdi, the father of the dead student, cried while taking delivery of the remains of his son and said: "I have been waiting in front of the morgue for 4 days. They were not giving me my son. This is a human child, not a dog's offspring. They could have reported the situation to me earlier. Why was not anyone interested in my son? I protest the incident; I protest the teachers and the administrators of the hostel."

Condemning the detention of their colleagues, the students staged a sit-in. Meanwhile, individuals with cameras who outnumbered the reporters and who were probably civil policemen began to photograph the students one by one. Realizing that, the students covered their faces.

These incidents in Istanbul last week marked the first concrete act of resistance by university students against YOK [Higher Education Council] in the post-12 September period. The bitterness of the youth—which swelled for months with incidents such as the establishment of student associations, the discovery of a listening device under the table of the Student Association at the Aegean University and petitions to the Assembly protesting YOK regulations—surfaced for the first time, and after an interlude of 6 years the students once again came face to face with the police at university gates.

The incident that caused "baloon to burst" was directly related to Article 44 of the Law on Higher Education Council, which the recently formed student associations have persistently opposed. This article, whose alteration has

been requested in hundreds of petitions sent to the Assembly, stipulates that students score a minimum average of 40 percent in their midyear examinations in order to be eligible to take the year-end examinations. moreover gave 2 extra academic years to students who failed in three courses during the normal duration of study. It was this article that caused the recent expulsion of thousands of students from universities. want universities to use passing of courses rather than promotion to a higher class as the criterion of success. They also want the abolishment of the continuous residency requirement and a score of 50 percent to be the passing grade for promotion to higher classes. The petitions sent to the Assembly include requests for the elimination of student fees and the expansion of student loans to a level which will meet the students' needs. Student parents wrote to the Assembly: "Our children studying in universities suffered the biggest share of oppression. As a result of tens of thousands of expulsions, many of our children have lost their self-confidence and some of them have even committed suicide."

Last week's events at Marmara University justified the parents' concerns. The incidents were prevented from growing by the compassionate attitude of the President of University, Professor Orhan Oguz, and the moderate stance of the police. While negotiating with student representatives, Professor Oguz said: "I was also severely shaken by the incident. Let us try to solve the problems through a dialog." He also won points by stating that the students need counseling services in view of their psychological condition. Deputy Security Director Mehmet Agar, who also talked to the students, played a significant role in ending the affair without incident.

As the bitter resistance of university students in Istanbul came to end, female students in Erzurum--who were cut off from their school for the same reason--ended their "death fast" the same day.

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POLITICAL

TURKEY

#### BRIEFS

TRABZON FDP MEMBERS JOIN CWP--A "golden microphone" was presented as a gift to CWP [Correct Way Party] leader Husamettin Cindoruk. In accepting the golden microphone, Cindoruk said: "We will not sing like the Prime Minister; we will speak about the people's problems." Orhan Guler, an electronic goods dealer who joined the CWP at a ceremony yesterday at the party headquarters, presented a golden microphone to Cindoruk as a gift. Cindoruk said that the microphone was "the most valuable gift he has ever received." Meanwhile, in Trabzon 350 members of the FDP [Free Democratic Party], including the party provincial leader A. Rasim Karanis and other party officers, joined the CWP in a ceremony held yesterday. [Text] [Istanbul TERCUMAN in Turkish 15 Dec 86 p 9] 9588

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SOCIAL

#### UNEMPLOYED YOUTH REPORTED IN CRISIS

Istanbul TERCUMAN in Turkish 15 Dec 86 p 9

[Mevlut Isik report]

[Text] Ankara—The number youth migrating from rural areas to cities is growing rapidly because of official and unrecorded unemployment in the agricultural sector. Those who have migrated from villages to cities are creating a new class disparagingly known as "shantytown youth."

According to statistics, drug addiction, sexual abnormalities and suicide are spreading among these youths who came to the cities in search of a better life but who did not find what they expected.

Causes of Migration

According to the results of various studies conducted by the Gazi University, the factors forcing the youth to migrate to the cities are as follows:

- "1. The high proportion of the young among the general populace; official and unrecorded unemployment in the agricultural sector; growing prosperity in the cities.
- "2. Scarcity of arable land; fragmentation of land through inheritance; mechanization in agriculture.
- "3. Blood feuds; growing insecurity of life and property.
- "4. Changes in the value system of rural regions; aspirations for better education and prosperity for the younger generation."

According to study results, the migrating youths in general cannot adjust to the rigors of life in big cities; the inability of the cities to absorb rural-born residents into the labor force is exacerbating the unemployment problem. Failure to adjust to city life results in acts of violence and vandalism and in time these acts take on an ideological dimension. City life erodes the morale of these youths and promotes materialist and selfish aspirations in them.

These youths who have migrated from rural areas to cities and who are known as the "shantytown youth" are strongly influenced by obscene publications.

Behavioral disorders are growing among youths influenced by obscene publications.

## Proposals

The study puts forward the following proposals to minimize these problems:

"-The Turkish youth must be taught to unite around national, moral and human basic values, to extricate themselves from the panic Western culture is causing in them, to recognize their own history of civilization and culture, to have a sense of sacrifice and to endorse the philosophy of success. To that end, middle school books must be revised and rewritten on the basis of specialization. Auxiliary textbooks must be prepared and must be recommended to the students.

Brain Drain Must Be Prevented

"Since the transmittal of knowledge and the development of skills are not sufficient in education, culture must also be instilled in the students, and the domestic and foreign issues facing Turkey today must be adequately discussed. The nongeographic brain drain that may emerge as a result of the erosion of national consciousness must thus be prevented.

National Cultural Works

"--The Turkish youth is thirsty for national and cultural works. Therefore, government agencies must begin publishing national works.

"-In Turkey, 79.9 percent of the youth in the 12-24 age group is not attending school. That being the case, efforts must be made to deliver national education and cultural activities to this group. The assault of obscene publications on Turkish society must be stopped just like the narcotics assault which was seen as a form of passive terror in the post-12 September period. The Turkish youth must not be allowed to aspire for the social diseases of industrialized Western societies, and these diseases must not be presented as a necessary part of modernization."

Dichotomy Between People and Intellectuals

The study says that in order to prevent demoralization among the youth, the country must "avoid abstract debates about progressivism-reactionarism, liberalism, democraticism, conservatism and revolutionarism which have been fabricated to virtually freeze Turkey's problems and to prevent the generation of new ideas." The study adds:

"Nothing has been gained from debates about vague and subjective concepts such as reactionarism and progressivism. The dichotomy between the people and intellectuals must not be allowed to grow. Mass communications media must show to the Turkish youth not only how the youth of the developed countries entertain themselves but also how they work and research. Not all the youths of those countries are in crisis or ridden with social diseases."

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ECONOMIC

#### BUDGET DEFICIT REDUCTION TO ENTAIL HIGH UNEMPLOYMENT

Vienna PROFIL in German 19 Jan 87 pp 20-21

[Article by Christian S. Ortner: "The Cost of Consolidation:]

[Text] Both government parties are agreed on the objective: The need to halve the budget deficit in the next 5-6 years. The amount involved is large: Almost 100 billion schillings that the state either needs to cut from expenses or obtain from somewhere. Higher taxes are out of the question—on that there is also general agreement. Consequently the republic will have to cut the 100 billion schillings from the budget.

Innsbruck right-wing economist Clemens August Andreae puts it this way: "The alternative is national bankruptcy. If the deficits continue to grow as they have up to now, this may yet happen in this legislative term." Without cutting the deficit, Andreae maintains, the republic would be unable even before 1990 to get any loans on the international money markets.

SP [Socialist Party] economist Ewald Nowotny also thinks that "a period of consolidation is imperative to maintain the budget's ability to function."

The compelling need for action brings Josef Taus to the point: "Either we put our house in order or outsiders will do it for us."

Although the red-black savings association has so far not said so very loudly, we will have to pay a high price for the new thriftiness. Should the government really spend 100 billion less, the domestic economy will suffer a body blow. After all, all government spending represents some kind of revenue on the other side—for construction companies, farmers or federally—supported theaters.

Whenever such spending is cut, the respective turnover goes missing, whether as earnings or jobs. Regardless of whether the finance minister squanders the money on meaningless items or uses it for the common good—it always turns over somewhere.

The unemployed will have to bear the main burden of budget consolidation—those unemployed who are as yet unaware of what awaits them but who, in the coming years, are bound to emerge as the result of declining government orders.

We are already able to more or less estimate how many will be affected. At the time the government was formed, the Institute for Higher Studies (IHS) developed a forecast model that calculated the development of unemployment figures in case of a moderate budget consolidation.

The result: 5 years from now, Austrian unemployment will be around 8 percent. That corresponds to 240,000 job-seeking Austrians in the annual average, far in excess of 300,000 in the peak months of December and January.

By comparison with last year, we will have almost twice as many unemployed.

Despite this scary result, the forecast was actually based on a continuing favorable development of the economy. The IHS model assumed continuing stable and low oil prices, a low inflation rate and a rising demand for Austrian exports.

The forecasters were quite realistic in setting a budget consolidation objective—a 3.3 percent deficit in 1991. This does not even amount to halving the deficit. (For the sake of comparison: The FRG deficit amounts to 1.3 percent, the Swiss deficit to 0.2 percent.)

Should, for some reason or other, the economic situation get worse than that simulated in the model, unemployment would go higher still. If there were an international economic crisis, every tenth Austrian might be out of work by 1990.

Even convinced conservative economists like Andreae agree with this sad scenario. "The calculation is sound and to be taken seriously. I also believe that our unemployment figures will be on that order." It is just that, in his opinion, there is no alternative. If the Austrians refuse to accept this, "we will have a super Mallorca package in 5 years' time, with quite unprecedented burdens," adds economic researcher Gerhard Lehner of the Institute for Economic Research (Wifo).

Neither left-wing nor right-wing economists are able to discern that royal road that elegantly winds its way between national bankruptcy and mass unemployment. "Economic policy confronts a conflict of objectives without any easy solution being available" (Nowotny). In order to handle this conflict of objectives with the required care, economic politicians would need to quite accurately know the effect of each budget measure on the national economy.

Unfortunately, five economists are apt to provide six or eight answers to these questions. Overall unemployment may be computed but not the politically interesting details.

The consequences of the (probable) raising of the retirement age for the purpose of cost savings can be ascertained without undue difficulty. Wife has

recently conducted a game with such a model. As an ample majority now takes early retirement, raising the legal retirement age would not have almost no effect.

Early retirement will therefore have to provide the lever. If early retirement is raised by 2 years (a fairly realistic figure in political terms), that is to 57 for women and 62 for men, the republic would save 4 billion in social security payments and increase revenue from contributions by 1.3 billion. On the other hand, only 200 million will have to be additionally paid by unemployment insurance—for those older employees who would then no longer be "carried along" by their employers and thus become unemployed.

These measures would therefore yield 5 billion schillings per annum.

However, its effect on the labor market is far more serious than we might assume from the additional 200 million in costs. The reason? A total of about 16,000 delayed retirees will now work 2 years longer and block the hiring of high school and college graduates. While these latter will thereby become unemployed, they will not cost the government anything, because they will not yet have a claim on unemployment compensation. Admittedly, the unemployment rate would grow by half a percentage point, but the government would elegantly shrug off the costs—onto the parents, for example.

The economic reckoning gets to be really hairy only when we consider the consequences of declining public investment, such as the question of how many new unemployed we would get if the government were to construct fewer roads.

In 1982-1984 alone, no less than five studies of that topic were published in Austria. All of them dealt with the same basic question: What is the effect on employment of a single billion cut from public spending?

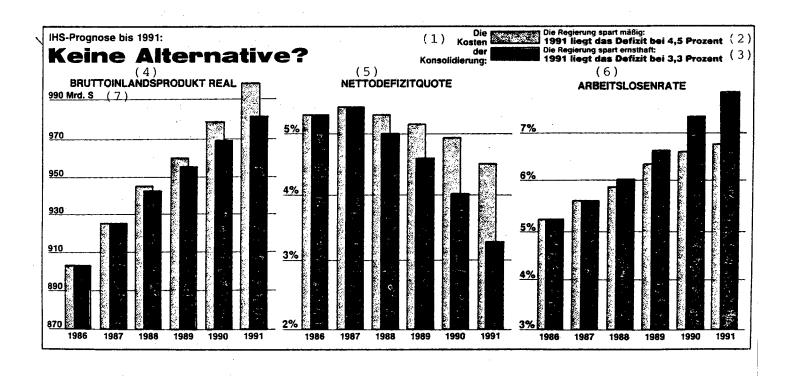
Results varied between 600 and 4,500 additional unemployed. Consequently the dresser of economic doctrines offers a suitable drawer for every strategy desired by the politicians. The most conservative schools of thought, for example, argue that a decline in public spending has no long-term effects on the labor market, because this is oriented to other criteria (such as wages). Leftist groups, on the other hand, argue that a drop in public spending sends the country into a spiral of poverty, because private demand and tax revenues in turn are bound to decline, involving an even greater need for restrictions.

Wifo staffer Gerhard Lehner shrugs his shoulders: "We tend to overestimate the adverse effects," Lehner believes in the reinforcing power of psychology. Though there would be a few more unemployed in the short run, the economy as a whole would respond in a positive manner to the policy of thrift. He holds that a sound budget would allow taxes to be lowered, and that in turn would encourage individuals as well as employers to spend more.

Lehner complains that the horrific scenario of 250,000 unemployed shown in the mathematical models such as that produced by IHS does not take into account the automatic decrease in unemployment consequent on the restoration of a healthy budget.

A short while ago, Ewald Nowotny acknowledged that politicians are unlikely to garner concrete instructions from this jungle of economic theories: "As an Austrian economist, I would like to be permitted to say that conflicts of objectives need not always to be solved by deciding for one or the other objectives. Instead there are shadings, something that Karl Popper called 'muddling through' and thereby raised it to the highest level of scholarly wisdom."

Graph: IHS Forecast Through 1991--No Alternative?



#### Key:

- 1. The cost of consolidation:
- 2. The government cuts moderately: the 1991 deficit is around 4.5 percent
- 3. The government cuts severely: the 1991 deficit is around 3.3 percent

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- 4. Real gross domestic product
- 5. Net deficit rate
- 6. Rate of unemployment
- 7. Billion schillings

MINISTRY ISSUES ECONOMIC DEVELOPMENT FORECAST THROUGH 1990

Bonn BMWI DOKUMENTATION in German No 277, Sep 86 pp 1-4

[Document issued by the Federal Ministry for Economics [BMWI]: "Forecast of Overall Economic Development in the FRG Through 1990"]

[Text] The growth process which started again in the FRG at the beginning of 1983 will continue in the years to come. Although in the first 2 years of the decade the GNP continued to decrease by one-half percent on average, real growth from 1983 to 1986 averaged approximately 2.5 percent. However, it was possible to avoid cyclical tightening of the market which had in the past frequently triggered economic countermeasures. The most significant characteristic of an upward trend without cyclical tightening and, at the same time, the best basis for its continuation is the stabilization of the price level. It is true that the sharp decrease in oil prices and the revaluation of the Deutsche Mark with respect to the U.S. dollar contributed to this, but even before that a considerable level of currency stability had been reached.

The substantial improvement of the German economic structure ought to be decisive for medium-term development opportunities. Not only the government has displayed new vigor, by demonstrating the will and the power for a fundamental new beginning, primarily through consolidation of the public budget (both of regional administrations and social security), but so has the private sector: At the beginning, it considerably exploited the export opportunities facilitated by the high dollar exchange rate and successfully faced international competition despite the appreciation of the German currency which had occurred in the meantime. However, with increasing domestic demand, the contribution of exports to economic growth will diminish correspondingly. Since the beginning of 1985, price adjusted exports are already clearly increasing more slowly than imports, so that in the final analysis it turns out that reinvigorating effects on production and employment in the world originate in the FRG. In the further course of the domestic economic growth process, the nominal surpluses in the balance of current transactions in goods and services should also diminish; at present these surpluses are still under the influence of terms-of-trade improvements.

Following the diverse improvements in basic economic conditions, trade and industry have increasingly concentrated on domestic economic development. Intensive modernization activities and intensified expansion trends are continuing in many areas, especially in capital goods industries. substantial growth of company investments has been triggered through higher profits and a favorable evaluation of long-term growth prospects by trade and industry. However, a long lasting strong increase in investments is also urgently needed for renewal and expansion of overall domestic manufacturing potential. In order to maintain and further improve the favorable investment atmosphere, economic, currency, and financial policies will therefore also have to focus in the medium term on the renewal of the economy, safeguarding of currency value, and tax reduction along with continuation of the consolidation of public budgets. In this endeavor, the FRG Government relies on the understanding of its citizens, and especially of its unions in connection with the collective wage contract, that a modern, efficient, and sufficiently diversified manufacturing apparatus dictates the economic future and the lasting improvement of the employment situation.

By the end of 1986, the number of employed people already should have increased by more than 600,000 in comparison with the low point at the end of 1983. This number confirms the validity of the economic course taken. Public studies and work redistribution, which raise production costs, do not contribute to a solution, but in the end instead contribute to the exacerbation of problems. It is more an issue of replacing obsolete work places with competitive ones and of creating additional employment opportunities in trade and industry.

## Employment, Productivity and Economic Growth

#### Erwerbstätige, Produktivität und Wirtschaftswachstum

(1)	(2)	(3) Beschäftigte	(5)	Produl	ctivität (6)	Bruttosozialprodukt				
Jahr	Erwerbs- tätige	Arbeit- nehmer	Arbeits- zeit	je Erwerbs- tätigen	je Erwerbs-	in Preisen von 1980	in jeweili- gen Preisen	Deflatio- nierungs- faktor		
	in Mio (4)			(7)	stunde (8	in Mrd DM (12)		(13)		
1980	26,328	23,009				1 485,2	1 485,2			
1982	25,709	22,436				1 471,0	1 597,1			
1985¹)	25,531	22,237				1 576,0	1 837,9			
1990²)	26,760	23,390				1 801	2 341			
1985/80 <sup>1</sup> ) 1982/80 1985/82 <sup>1</sup> )	- 3.0 - 2,4 - 0,7	- 3.4 - 2.5 - 0.9	Vera - 2,4 - 1,2 - 1,3	9,5 2.0 7,4	insgesamt i   12,2   3,2   8,8	n vH $\begin{pmatrix} 1 & 6,1 \\ & -1,0 \\ & 7,1 \end{pmatrix}$	23,7 7,5 15,1	16,6 8,6 7,4		
1990/85 <sup>2</sup> )	+ 5	+ 5	<b>– 3</b>	9	12	141/2	271/2	111/2		
	Jahresdurchschnittliche Veränderungen in vH (15)									
1985/80 <sup>1</sup> ) 1982/80	- 0,6 - 1,2	- 0,7 - 1,3	- 0,5 - 0,6	1,8 1,0	2,3 1,6	1,2 - 0,5	4,4 3,7	3, I 4,2		
1985/82 <sup>1</sup> ) 1990/85 <sup>2</sup> )	- 0,2 + 1	- 0,3 + 1	- 0,4 - ½	2,4 1 <sup>1</sup> / <sub>2</sub>	2,8 2 <sup>1</sup> / <sub>2</sub>	2,3 2 <sup>1</sup> / <sub>2</sub>	4,8 5	2,4 2		

(16) 1) Stand: Vorläufige Ergebnisse der Volkswirtschaftlichen Gesamtrechnung des Statistischen Bundesamtes, März 1986
 (17) 2) Mittelfristige Projektion, bearbeitet im Bund sministerium für Wirtschaft

## Key:

1.	Year		
2.	Number	of	employees

3. Workers

4. In Millions

5. Hours of work

6. Productivity

7. Per employee

8. Per employee hour

9. GNP

10. 1980 prices

11. Current prices

12. Billion DM

13. Deflationary factor

14. Total changes in percentage

15. Average annual changes in percentage

16. 1) Status: preliminary results of the national economic overall accounting of the Federal Office of Statistics, March 1986

17. 2) Medium-term projections, processed at the Federal Ministry of Economics

With this improved starting position and with the assumption that:

--the unions involved in the collective wage contract will make adequate flexible agreements regarding both the development of wage scales and the design for utilization of labor;

-- the return on company investment develops favorably compared to capital market interest rate;

—the world economy does not experience substantial economic or political disruption;

the Federal Government assumes, especially for its medium-term budget considerations, the following evolution national economic indicators:

- --real growth of about 2.5 percent on average each year from 1986 to 1990;
- --holding average annual inflation in the national economy to about 2 percent;
- --an annual increase of the overall number of employees and workers of about 1 percent;
- --a decrease in the proportion of nominal external contributions to the GNP to about 3 percent in 1990.

For the GNP in current prices, an average annual increase of about 5 percent results from assumptions about real economic gorwth and price evolution. In this calculation, the federal government assumes that the expansion of investment activities started at companies will continue dynamically throughout the projected medium-term period and also that various government levels will provide for sufficient additional investments, that is, investments which enhance private activity. There is no contradiction when a relatively strong growth of private consumption is assumed at the same time. The real external contribution, however, will probably shrink, and housing investments and government consumption will probably grow relatively slowly. If the economic policy design which has been so far confirmed by results is continued strongly and systematically, and if the economy takes advantage of the available opportunities, a growth trend could be achieved which even exceeds that which is projected.

## Use of the GNP at Market Prices (in current prices)

## Verwendung des Bruttosozialprodukts zu Marktpreisen (in jeweiligen Preisen)

	produkts Ver	Privater	Staats-	(5) B						
Jahr (1)		Verbrauch	verbrauch (4)	insgesamt (6)	Anlagen	Vorrats- veränderung	Außen- beitrag			
	Mrd DM (10)									
1980	1 485,2	840,8	297,8	349,6	335.8	13.8	- 3.0			
1982	1 597,1	918,1	326,2	315,4	326.9	-11.5	37,5			
1985 <sup>1</sup> )	1 837,9	1 027,3	<b>3</b> 65,7	<b>3</b> 73,5	359.3	14.2	71.4			
1990²)	2 341	1 290	456	526	511	16	68			
•			Ante	ile am BSP i	n vH (11	)				
1980	100	<b>5</b> 6,6	20.1	23,5	22.6	0.9	- 0,2			
1982	100	57.5	20.4	19,7	20,5	- 0,7	2,3			
1985 <sup>t</sup> )	100	55,9	19,9	20,3	19,6	0,8	7.0			
1990²)	100	<b>5</b> 5	191/2	221/2	22	1/2	3,9 3			
			Veränden	ungen insges	amt in vH	(12)				
1985/80 <sup>1</sup> )	23,7	22,2	<b>2</b> 2,8	6.8	7,0					
1982/80	7,5	9,2	9,5	- 9,8	2,7		•			
1985/82 <sup>1</sup> )	15,1	11,9	12.1	18,4	9,9	1 ' 1	•			
1990/85²)	271/2	251/2	241/2	41	42	:	:			
		Jah	resdurchschn	ittliche Verär	nderungen ir	vн (13)				
1985/80 <sup>1</sup> )	4,4	4,1	4.2	1,3	1,4					
1982/80	3.7	4,5	4,7	- 5,0	- 1,3	1 : 1				
1985/821)	4,8	3,8	3,9	5,8	3,2	1 1 1				
1990/85 <sup>2</sup> )	5	41/2	41/2	7	71/2	1 1	-			

(14)1) Stand: Vorläufige Ergebnisse der Volkswirtschaftlichen Gesamtrechnung des Statistischen Bundesamtes, März 1986 (15)2) Mittelfristige Projektion, bearbeitet im Bundesministerium für Wirtschaft

#### Key:

- 1. Year
- 2. GNP
- 3. Private consumption
- 4. State consumption
- 5. Gross investments
- 6. Total

- 7. Capital investment
- 8. Changes in supplies
- 9. External contribution
- 10. Billion DM
- 11. Portion of GNP in percentage
- 12. Global changes in percentage
- 13. Annual average change in percentage
- 14. 1) Status: preliminary results of the national economy in overall accounting of the Federal Office of Statistics, March 1986
- 15. 2) Medium-term projection, processed at the Federal Ministry of Economics

## 8617/9604

CSO: 3528/M102

ECONOMIC

## DECLINE IN PRIVATE DEPOSITS NOTED

Athens I VRADYNI in Greek 30 Jan 87 p 1

[Text] During the January-November 1986 11-month period private deposits marked a vertical drop. Their total increase in nominal drachmas was smaller than in 1984 and less than 80 billion drachmas than in the corresponding 1985 period. In November the demand deposits declined by 7,345 million drachmas and savings deposits by 11,442 billion drachmas.

Also, during the 11-month period demand deposits dropped by 10,757 million while savings deposits (including interest) increased by 201,018 million drachmas compared to 231,515 million during the corresponding 1985 period.

In the same 11-month period, the total increase in private deposits reached 364,286 million compared to 423,537 million in 1985 and to 377,483 million drachmas in 1984. It should be noted that this amount includes interest which became part of capital and that in real drachmas (de-inflated) there is a decline in private deposits which is more than 20 percent compared to 1984.

This large decline in private deposits will cause immense problems in financing the economy, especially since the government decided—for the second time in 2 months—to increase the percentage commercial banks are obligated to deposit in the Bank of Greece.

7520 CSO: 3521/74

ECONOMIC

INDEPENDENT INSTITUTE: GOVERNMENT BUDGET DEFICIT TO GROW

Oslo AFTENPOSTEN in Norwegian 30 Jan 87 p 37

[Article by Truls Martinsen: "Lasting Deficit in State Revenues"]

[Text] No matter which policy is pursued in the years leading up to 2000 there will be a substantial gap between revenues and the expenses needed to cover public services. The "Scenarios 2000" project associated with the Institute of Business Administration has conducted analyses that show that public spending will increase by around 2.6 percent per year up to the turn of the century, while revenues, even without tax relief measures, will increase by only 1 percent. The result will be a substantial deficit in the national budget in the years ahead.

These dramatic figures were presented by the leader of the project, Terje Osmundsen, at the Employers' Confederation [AF] conference in Sandefjord yesterday. He stressed that they had made cautious assumptions in their estimates so that the projected spending increases are virtually automatic. The standard improvements in public services that form the basis for the estimates are moderate. No expensive reforms were anticipated in education, research and care for the elderly, areas where strong steps are needed.

The reason for the dramatic gap between spending and revenues in the years ahead is the decline in oil revenues. The project group does not anticipate any increase in oil prices. Even if they rise there will be a need for financing, Osmundsen noted. Nor will tax increases help close the gap between expenses and revenues, he said. The state's financing needs (the budget deficit before borrowing transactions) have been estimated by the group at 32 billion kroner in the year 2000 with only a modest extrapolation of the current standard of public services.

This situation creates a dramatic need for increasing the productivity of mainland Norway. The need is too great for industry to handle alone, he said. The service branches and the public sector must also become involved. Quality and productivity within the health sector, education, communications and other services could be decisive in the effort to bring Norway's economy on the right course, he stressed.

The AF conference in Sandefjord is dedicated to privatization and Osmundsen recommended putting all the old hobbyhorses in the privatization debate in the stable. He feels the question of creating a more intelligent public administration is more urgent than the question of whether or not to privatize public services. Freedom, responsibility for results and competition were Osmundsen's catchwords for the further development of public services.

6578

cso: 3639/17

ECONOMIC PORTUGAL

PRIME MINISTER'S ECONOMIC FIGURES CONTESTED

Lisbon O JORNAL in Portuguese 19 Dec 86 p 26

[Article by Daniel Amaral]

[Excerpts] "In 1986, Portugal will have achieved the highest growth in production, the largest increase in purchasing power, and the greatest fall in the rate of inflation in all of Europe."—Cavaco Silva, 12 December 1986.

As far as we know, no political party has called attention to a factor which we consider the most serious of all: the figures quoted by Cavaco in defense of his theory are again incorrect—and the frequency with which the prime minister, and other ministers, tell untruths is becoming a phobia worthy of concern, a morbid fear for which there is no reason.

Not True

Portugal is the country that in 1986 experienced the greatest fall in the rate of inflation in Europe?

Let's see. Before anything, to what type of prices is Cavaco Silva referring? To the prices implicit in domestic production? To the prices implicit in world demand? To the prices implicit in personal consumption?

Let us assume that they consist of the latter, since it is through those prices implicit in personal consumption that we normally measure inflation, and it is also the indicator most favorable to the government. As is known, average inflation fell from 19.3 percent in 1985 to 12 percent in 1986.

Granted that, let us ask another question: Does Cavaco Silva mean to compare prices in absolute or in relative terms? If he means to compare them in absolute terms, we can not fathom the reason why: last year the decrease was of 10 percentage points, and this year barely 7, and we do not remember that the previous government was constantly calling itself the best in the world. In either case, and even from this viewpoint, the achievement of Portugal is in no way the best in Europe: according to the latest figures available, prices in Turkey fell 11 percentage points this year.

But it is not credible that an intelligent person like the prime minister be reasoning in absolute terms. It is not the same thing for a country to fall from 50 percent to 48 percent inflation as for one to fall from 4 to 2 percent, even though the difference is the same 2 percentage points. In the first case, inflation is practically the same; in the second, it is exactly half.

The intention of Cavaco Silva is, surely, to make a comparison in relative terms: inflation in Portugal fell 7 percentage points from 19, which is 37 percent. The greatest fall in prices in Europe? It makes one want to laugh. Immeasurably greater declines were experienced in France (60 percent), Belgium (82 percent), Germany (108 percent); in the latter, inflation fell from 2.2 percent in 1985 to -0.4 percent in 1986, that is, prices fell! In the EEC itself, the fall in prices has been shown to be greater than 50 percent.

Not True

Portugal was the country in Europe where, in 1986, there was the greatest increase in production?

Let's see. According to the latest figures provided by the government, growth in production in 1986 was expected to be 3.9 percent, only slightly more than in 1985 (3.3 percent). This growth, however, is probably very much overestimated. In the first place, why allow a growth of 9 percent in investment, when this should have been much less—that is precisely what indicators such as credit, steel and cement consumption, machinery imports, etc. suggest. In the second place, why should the components of foreign credit themselves behave more negatively than what the government says?

But let us be nice and accept as true the 3.9 percent figure the government gives us. The greatest growth in Europe? It makes one want to laugh again. According to the latest OECD figures, higher growth is predicted in Norway (4.3 percent) and in Turkey (4.8 percent). Did Cavaco Silva not know this? It is certain that he did. It is only that he is not able to avoid that strange obsession: to always be the greatest, the best, the most important in the universe!

When, after the speech, we decided to consult the statistics to check the veracity of the prime minister's words, we still vaguely admitted that he could be right with respect to the increase in purchasing power. In fact, with an increase in salaries on the order of 17 percent and an inflation rate of 12 percent, the increase in purchasing power is about 4.5 percent, indisputably greater than the European average. Of course the situations were not comparable: in Europe, salaries have been on the rise for several years; in Portugal, they have been on the decline for several years. But in any case...Is Cavaco Silva, at least in this instance, right? The devil, he's still not! An increase in salaries greater than ours is forecast, for example, in the United Kingdom (5.3 percent) which, the last time we looked, is still in Europe.

In sum: in 1986 Portugal was not the country with the greatest growth in production, nor the largest increase in purchasing power, nor the greatest fall in inflation, in Europe.

13026/12851

CSO: 3542/34

ECONOMIC PORTUGAL

#### COMPARISON OF NATIONAL ECONOMIES FAVORS SPAIN

Lisbon O JORNAL in Portuguese 30 Jan-5 Feb 87 p 2-E

[Article by Daniel Amaral: "This Is the Nature of the Spanish Challenge"]

[Text] Some days ago, at a midday banquet attended by several journalists, Spanish Ambassador Gabriel Ferran summed up the accomplishments of the first year of his stay in Portugal. "Although Spain's surplus in the Portuguese-Spanish trade balance has been maintained," he said, "it is tending to diminish rapidly."

Specifically, data gathered at the General Directorate of Spanish Customs show that Portuguese exports to Spain increased by 57.8 percent from 1985 to 1986 while Spanish exports to Portugal were increasing by only 43.5 percent, with the result that on the Portuguese side the proportion of imports covered by exports increased to 48.2 percent from 43.9 percent. Moreover, INE [National Statistics Institute] figures for the period January-September of the years in question had already appeared to indicate that in the first year following the joint integration of the two countries into the EEC, Portugal made up some of the distance—at least in the area of foreign trade—by which it had lagged behind its neighbor, Spain.

But is this actually the case? Is this deficit—which is still enormous—really showing a tendency "to diminish rapidly"? Will the opening of national borders—viewed solely from the standpoint of Portuguese-Spanish relations—be beneficial for our country?

Standard of Living

Let us select several indicators for consideration.

Spain has a territory of 505,000 square kilometers, compared to Portugal's 92,000: that is to say, Spain is approximately five and a half times as large as our country. Virtually the same proportion prevails with respect to area under cultivation. Spain, however, has a lower population density, in that its total population of around 40 million is only about four times as large as Portugal's.

When we compare the indicators that traditionally measure the standard of living, the situation is always decidedly in Spain's favor. Spain has 67 percent more doctors per 1,000 inhabitants; 72 percent more motor vehicles; 80 percent more television sets; 118 percent more telephones; and so on. Even productivity per capita is today more than twice that of Portugal.

Spain has been making steady progress in respect to its rate of inflation, which although still far from equaling the rate already achieved in central Europe is nonetheless still far removed from the Portuguese situation: in 1986, prices rose only 8.5 percent in Spain compared to 11.7 percent in Portugal.

In one category, however, Spain has persistently failed to find a solution: the category of unemployment. At the close of 1986, approximately 3 million workers were unemployed, the equivalent of 21.5 percent of the national labor force and substantially twice the European average; moreover, the situation is not expected to improve much in 1987. Spain's unemployment rate is also the highest in Europe, and is higher even than that of any country in the OECD.

#### Structure of Production

Given these facts, how can one explain our continuing backwardness vis-a-vis the Spaniards when our countries are such close neighbors, with such a great potential for mutual influences?

The explanation is of course--among other things--to be found in the structure of production and in productivity. It is a well known fact that countries in process of development gradually move their labor force out of agriculture into manufacturing and from manufacturing into the service industries. It is the normal evolutionary process. In countries such as Germany, Norway, and Sweden, agriculture no longer employs more than 5 to 6 percent of the labor force, whereas 50 to 60 percent are employed in the service industries. In countries such as Spain, Greece, and Portugal, however, from 20 to 30 percent of the labor force is still in agriculture, as against only 40 to 50 percent in the service industries.

This is therefore the principal explanation. Despite the fact that Spain is also--for various reasons--one of the most backward countries in Europe (preceded, in this respect, only by three countries: Turkey, Greece, and Portugal), Spain began its process of industrialization long before we did; and inasmuch as productivity in the agricultural sector is as a rule very low, this difference in structure shows up later as a difference in production. According to data for 1985, 17 percent of the Spanish labor force was in agriculture and accounted for 6.3 percent of the nation's production. In that same year, 23 percent of the Portuguese labor force was still in agriculture and accounted for only 9 percent of overall production. Relative productivity was very low in both cases, but this phenomenon was obviously more serious in Portugal by virtue of its greater dimensions.

The recent trend, however, has not been of any help. With the passage of time, backward countries usually narrow the gap between themselves and the developed

countries. The reverse has been occurring between Portugal and Spain: in the period 1983-1986 the Spanish national product increased by 10 percent and the Portuguese by only 4 percent, with the result that the already very large gap ended up becoming even wider. The situation is not expected to be turned around in 1987, either: the OECD forecasts a similar growth rate for both countries (3 to 3.5 percent).

### Foreign Trade

The problem of foreign relations remains to be addressed.

The Spanish trade balance normally shows a deficit, inasmuch as Spain's exports cover only about 80 percent of its imports. Tourism, however, is more than adequate to bring the situation again into balance: in the last 3 years the current account balance consistently showed surpluses that attained an overall total of almost \$10 million. As is only natural, Spain trades mainly with Europe, which accounts for 44 percent of Spain's imports and 61 percent of its exports.

Portugal's trade balances also show a deficit, but it is usually larger. In 1985, however, the percentage of imports covered by exports was substantially the same as the percentage in the case of Spain (80 percent). It is just that in our case this deficit is very far from being covered by tourism, or evenuntil very recently—by tourism plus the remittances of emigrants: our current account balance, which chronically shows a deficit, achieved equilibrium only in 1985.

As for the upturn in our trade with Spain, it does not appear that we should start celebrating: the improvement registered in 1986 is only a very slow improvement, and the mere fact that we continue to buy more than twice as much as we sell in no way enhances our commercial capabilities.

In conclusion, Spain--whose productivity is already double ours--has been steadily widening this gap and is selling on our markets twice as much as it buys from us. Given the opening that has resulted from the joint entry of our countries into the EEC, and given our relative positions, we shall be over-whelmed if we do not take timely precautions. Only one course remains open to us: that of improving our productivity so that we shall be able to compete.

This is the nature of the Spanish challenge.

Table 1. Portugal-Spain: Evolution of Domestic Spending (in percentages)

	Spain			Portugal			
Categories	1985	1986	1987	1985	1986	1987	
Private consumption Public consumption Investment (FBCF) Exports Imports GDP pm	1.6 3.3 5.4 3.9 6.3	3.25 3.25 9.5 0.75 8.5	3.25 2.75 7.25 3.5 7.25 3.25	0.5 3.0 -5.5 10.5 3.0 2.8	4.5 1.5 6 5 9.5 4.25	3.5 1.5 7.5 4.5 7.5 3.5	
Memorandum:			·				
<ol> <li>Prices included in GD</li> <li>Inflation</li> <li>Unemployment</li> <li>Current accounts (bil lions of U.S. dollars</li> </ol>	8.8 21.9 - 2.7	10.75 8.5 21.5 4.75	6.5 6.25 21.25 5.25	21.6 19.8 10.2 0.4	17.75 12 10 1.75	9.5 9.5 10 1.25	

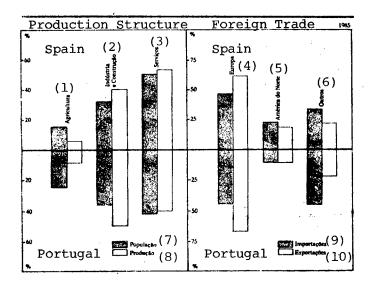
The cumulative balance currently shows Spain's per capita productivity to be more than twice that of Portugal, and for the present no significant improvement is in prospect.

Meanwhile, Spain's rate of inflation is lower than that of Portugal, while at the same time unemployment is very much higher: it is a headache for the Spaniards.

It is in the arena of trade, however, that the contest between the two countries will take place; we must improve productivity in order to be able to compete.

Source: OECD

Figure 1.



Key:

- 1. Agriculture
- 2. Manufacturing and Construction
- 3. Service industries
- 4. Europe
- 5. North America

- 6. Others
- 7. Population
- 8. Production
- 9. Imports
- 10. Exports

The productivity of the agricultural labor force is as a rule very low; as a result, the economic development of a country goes hand in hand with the transfer of this labor force to other sectors of production. One of the ways in which we lag behind Spain is the fact that 23 percent of our national labor force is still in agriculture, compared to only 17 percent of Spain's.

In the area of foreign trade, the structure is very similar; both countries naturally accord special treatment to Europe and today even more so, after joining the EEC.

Sources: OECD; Bank of Portugal.

10992

CSO: 3542/52

ECONOMIC

MODERATE GROWTH FORESEEN FOR 1987

Lisbon SEMANARIO in Portuguese 20 Dec 86 p 21

[Article by Alfredo de Sousa]

[Text] "In 1987 production will not increase more than during this year, gross domestic product will grow by 4 percent and real wages will increase 3.5 percent during the first half of the year, although in the second half, that rate will depend on whether or not the inflation goals set by the government will have been achieved," says Alfredo de Sousa, in an analysis of the economic prospects for 1987.

As is typical of all short-term predictions, we are going to be optimistic and suppose that there will be perfect foreign and domestic political stability in 1987. Any other way it would become impossible to make any forecast, since there would not be a model with a sufficient number of scenarios to cover all the political possibilities.

There are at least 3 predictions on the development of the Portuguese economy in 1987. There is the one of the Ministry of Finance. The one by the EEC Commission has been published, which differs slightly from the first. Finally, there are also the estimates and comments of the Commission on Economics and Finance of the AR [Assembly of the Republic], expressed in their report on the budget for 1987. These three sources serve as a base for a more independent synthesized prediction.

### Production and Income

In the coming year improved prospects for an increase in production over those registered in 1985 and 1986 are not anticipated. In the first of those years, the gross domestic product increased 3.5 percent in real terms; in 1986 it will have risen 3.8 percent; and in 1987 an increase of 4 percent is predicted. There will thus be a slight acceleration.

Taking into account the taxes approved in the AR this month, as well as the agreement in the Social Management Council, an increase in real wages of 3.5 percent is predicted in the first half of the year, although in the second half that rate will depend on whether or not the inflation goals set by the government will have been achieved. Also taking into consideration the

movements of repatriated funds and the large amount of non-registered capital, it can be estimated that disposal purchasing power will increase some 4 percent in real terms, also at least in the first half of the year.

As Portuguese exports slowed this year, it is likely that their low rate of expansion will continue to the following year, probably not passing a rate of 3 or 4 percent growth in volume increase. The Portuguese economy's engine of growth will continue to reside in domestic market expansion, thus exacerbating the distortions created this year, which constitute a new danger of disequilibrium, of heading for a new recession.

The trade deficit in the balance of goods and services will increase over the next year. This worsening will be due primarily to the growth that is expected in imports. The government forecasts a growth of 8 percent in the volume of imports for this year, but it is very probable that growth will continue at a rate close to last year's, which will have been at between 10 and 12 percent.

## External Equilibrium

There are compensations, however, mainly due to liquid receipts from tourism and remittances from emigrants, and the increasing rate of return of the latter with their savings and their subsidies for return. Some of the figures will be affected by hidden entry of non-registered capital, just as they were affected this year. But this capital is extremely volatile; just as it entered in a massive way this year, it could just as easily leave.

One should expect, as a result, that a positive current accounts balance will occur in 1987 as well, perhaps on the order of \$800 million.

Due to the growing movement of purchase of domestic enterprises by foreign entities, and the slight increase in new direct investment, it can be estimated that the capital balance in 1987 will continue to be positive, even if certain payments expected on the foreign debt come to be made. It will show good sense if these payments are truly made, since this debt will probably be about \$16 billion by the end of this year.

It is not expected that the small growth in the foreign exchange market for currency futures will produce any instability. It would even be desirable to take broader measures, in order for it to be possible to open capital markets to movements abroad and to pull much capital out of hiding.

## Investment and the Stock Exchange

Substitution investment is expanding and it is expected that this growth will continue through the following year. Construction should recover next spring, when it is estimated that the housing stock will be virtually depleted and public housing orders in full execution. However, spectacular growth in private investment is not expected, ignoring the possibility of a large, highly-

concentrated foreign project this year. A rate of real growth in gross capital investment of 7 or 8 percent should be considered an already reasonable performance.

The supply of financial funds should remain high, the national rate of savings not being much less than during 1986. It can be expected, therefore, that new offerings will find takers and that share prives will continue to climb during the first half of the year.

Put simply, a portion of these funds is and will be diverted to the housing market, as a result of which an increase in the price of housing and land can be expected. The growth in housing credit itself is one of the factors that feeds this climb in prices.

#### Inflation

Paradoxically, it can almost be said that the main problem of the Portuguese economy in the short term is too much money. Real purchasing power has increased substantially in 1986, for various reasons: It would be difficult for this increase to be repeated in 1987, especially if the country remains in this climate of constant political tension between the government and the assembly. If, apart from consumption, investment increases, expansion in total domestic demand will be appreciable.

Part of this increased demand will be satisfied by imports, especially from Spain, which cannot continue indefinitely...or we will someday have the employers and the unions protesting against invasion by the Felipes. Another portion of it will be eliminated by domestic price increases, primarily in non-marketable goods.

However, the government aims at an inflation (to the consumer) of about 9 percent for 1987. It does not appear impossible that this rate be held to throughout the first half of the year, because the government will do everything to maintain official prices, even if that is extremely expensive financially. In this sense, a political cost is expected this year for some necessary adjustments which are statistically compatible with 1987 goals. This effort will be made above all in the first half of the year until the principal collective labor negotiations are concluded, and will probably take place during the entire year if there is a threat of elections.

However, in the second half of the year, the probability of inflation continuing to fall should decline, especially if there are increases in the price of petroleum above the \$18 expected at the end of winter, and if domestic demand remains strong. It is not deemed totally believable that the annual rate of inflation can be held to 9 percent without major sleight of hand.

#### Summarizing

We are not going to live much better than we were able to this year. The supply of foreign goods will increase and money will appear more abundant. That could create some illusions that politicians tend to know how to take advantage of. Our gradual entry into the EEC will continue to give some headaches, but will not fail to be stimulating if Portuguese producers decide to "take the bull by the horns"...In any case, we should continue to grow at a rate, despite everything, higher than the European average. We hope that this moderately optimistic prediction will not be shot down by struggles between the powerful.

13026/12851 CSO: 3542/34 ECONOMIC

MINIMUM SALARIES, AGRICULTURAL INVESTMENTS RISE

Lisbon DIARIO DE NOTICIAS in Portuguese 31 Dec 86 p 5

[Excerpts] The Council of Ministers approved yesterday new increases for family aid and subsidies for family loans of between 12 and 17 percent. However, the UGT, in its first reaction to these increases, called them "insufficient and unsatisfactory."

In yesterday's meeting, the government decided to revise the minimum wage for agriculture, which will be increased 14.9 percent, and that of domestic service workers, which will rise 15.1 percent.

In agriculture, the national minimum wage will be set at 22,400 escudos, while for domestic service it will be revised to 17,500.

The new minimum wages are also applicable to workers between the ages of 18 and 20, which was not the case previously. The ministers decided to revoke the existing limitation with respect to young workers, who only received 75 percent of the national minimum wage, in accordance with existing legislation.

There still exists a reduction of 25 percent for workers of 17 years of age, and 50 percent for those of between 14 and 17 years. At the same time, the government has created a special temporary system for youths up to 25 years of age who, because of a labor contract, find themselves in a training program or apprenticeship, the communique from the Council of Ministers states, without adding any further details.

The group of ministers has also decided to establish a special system for enterprises of up to 50 workers in which the national minimum wage "would cause difficulties in implementation."

Artisan activities would be subject to a special program the government will establish through offices attached to the ministries responsible for the respective sectors, the Council of Ministers decided.

The government has also approved the regulation of the Specific Portuguese Agricultural Development Program (PEDAP), which will be developed over a

period of 10 years, with a total investment of over 200 billion escudos. Of that total, 105 billion will correspond to financial participation on the part of the European communities.

The program has as its general objectives improvement in the production and marketing conditions of agricultural products and of the structural situation in the country's primary sector.

13026/12851 CSO: 3542/34 ECONOMIC

#### BRIEFS

DEFICIT IN EEC TRADE—Portuguese trade with the EEC moved from a positive balance of 1.8 billion escudos in the first 9 months of 1985 to a deficit of 52 billion during the same period in 1986, the National Statistics Institute revealed. Spain, Italy and West Germany were the EEC countries that have increased their sales to Portugal the greatest. Total Portuguese exports reached 779 billion escudos during that period. This was an increase of 9.5 percent. Imports grew less: 3.7 percent. The total was 1,013 billion escudos. The debt service ratio is the best it has been for 3 years: our overseas pay for 77 percent of what we import. Portugal had a positive trade balance with the EFTA (European Free Trade Association) and with the lusophone African countries. [Text] [Lisbon O JORNAL in Portuguese 24 Dec 86 p 5] 13026/12851

FEDER FINANCING—Portugal will benefit from a FEDER contribution totaling 4.2 billion escudos, aimed at co-financing 180 investment projects, a source from the Lisbon bureau of the European Commission's announced. The contribution that gained the European Commission's approval is the fifth since our having joined the communities and brings to 49.5 billion escudos the value of FEDER-cofinanced activities in Portugal. The investment projects just approved are concentrated in the areas of hydraulic infra-structure and transport and have mostly been proposed by local authorities in mainland Portugal. The rest of the projects originated with the Central Administration and the autonomous regions of Madeira and the Azores, which received 30 percent of the fund's contribution. Of the remainder, 26 percent is destined for the Central region. Support projects for productive activities, mainly aimed at industrial parks, are located in the Central, Northern and Alentejo regions, and have received aid totaling 417 million escudos. [Text] [Lisbon TEMPO ECONOMICO in Portuguese 18 Dec 86 p 5] 13026/12851

REPATRIATED FUNDS——A not very well-kept secret: the influx of Portuguese funds which until recently had been kept in Switzerland, South Africa and other refuges. About 150 million contos reportedly returned to this country in 1986. This fact may have various interpretations, but only one consequence: the improvement of the Portuguese economic situation. [Text] [Lisbon O DIABO in Portuguese 17 Feb 87 p 2] /8309

cso: 3542/61

ECONOMIC

### OVERVIEW OF SOUTHEAST ANATOLIA PROJECT

Istanbul MILLIYET in Turkish 12 Nov 86 p 11

# [Aydin Ozdalga report]

[Text] As the "Southeast Anatolia Project," or SAP, which will change the destiny of the Turkey of 2000 staggers forward, it is bringing its own problems with it. It is reported that the 7-trillion-lira project which will generate 23 billion kilowatt-hours of electricity a year and will irrigate 18 million donums of land has some major infrastructure deficiencies and flaws.

### Energy

The 23 billion kilowatt-hours of electricity SAP will generate when completed will be transmitted to the west. For that purpose the Turkish Electric Power Enterprise [TEK] is building a new power transmission line.

However, some circles have criticized the new 380,000-kilowatt-hour line TEK is building. Kaya Bozoklar, the president of the Chamber of Electrical Engineers, says:

"A 380,000-kilowatt-hour line will be adequate initially. However, it will not be able to handle the full load when all the power units become operational. When one day we cannot transmit our generated electricity to the west, who will account for that? Provisions should have been made for Turkey's needs in 2000, and a transmission line with a minimum capacity of 500,000 kilowatt hours should have been built."

Erdogan Demiryurek, head of TEK's Planning Department, responds to this criticism as follows:

"We designed this system on the basis of projected demand in Turkey in 2000 and with the assumption that electricity consumption will grow by 13 percent a year. Had we built a bigger system, it would be more expensive and we would have spent more foreign currency. The 380,000-kilowatt-hour line is being built by domestic firms."

# Irrigation

One of the major objectives of SAP is to carry water to the plains of Urfa and Mardin to facilitate irrigation farming. That will make possible the growing of two or even three crops a year and a 10 to 20-fold increase in agricultural output.

The government's 1987 investment plan makes the following reference to irrigation projects in Turkey:

"The projects cannot be completed on schedule because many of them have been prepared without procuring the necessary resources. Yields have been low in the irrigation projects that have been implemented. Irrigation projects which are implemented before excess water is drained and the land is graded cannot be expected to work."

Experts point out to another peril with regard to the irrigation projects within the framework of SAP:

"When the Ataturk Dam and the Urfa Tunnel are completed, water which will irrigate 5 million donums of land will flow through the tunnel to the plains. However, the canals that will have been built by that date will be capable of irrigating only 1 million donums of land.

"Because of this faulty planning, 80 percent of the water will be wasted, and produce worth billions of Turkish lira will be lost. Moreover, the yield expected during the economic life of the dams will not be realized. When you do not have canals which will distribute the water, what good is it to spend billions of lira to build dams?"

Meanwhile, the construction of the Urfa Tunnel which will carry the water captured by the Ataturk Dam to the Harran Plain is reported to be behind schedule. Construction of the tunnel first came to a halt because the contractor stopped work. Then construction stopped for 3 years because of unavailability of funds. Construction work for the dam is also at a standstill.

### Fertilizers

Fertilizers will be the most important input material for the agricultural growth expected as a result of the irrigation project. Only 400,000 metric tons, that is 5 percent, of the 8 million metric tons of fertilizer consumed in Turkey in 1986 was used in the SAP region.

According to initial estimates, Turkey will consume 25 million metric tons of fertilizer in 2000 and nearly 5 million metric tons, or 20 percent, of that will be used in the SAP region.

Ministry of Agriculture officials "categorically" rule out the prospect of a shortage of fertilizers in the region. Relying in particular on the fertilizer factory with an annual capacity of 2 million metric tons currently

under construction in Mersin, the officials said: "This factory alone will meet half the demand. New factories to be built and existing public and private sector factories will fill the balance of the demand."

On the other hand, Mehmet Tuncay, secretary general of the Chamber of Agricultural Engineers, is pessimistic on the matter:

"The fertilizer problem cannot be solved by remote factories which are dependent on imported materials. Moreover, fertilizer consumption will increase not only in the SAP region but also in other regions. Therefore, it is unwise to rely too heavily on the new factory in Mersin.

"The problem can be resolved by utilizing fertilizer raw materials available in the SAP region and building factories in Elazig and Mardin. A factory built in Elazig in 1966 was shut down because of a lack of raw materials. In truth, raw materials are available in that area. Fertilizers brought from overseas or from remote corners of the country would be expensive. In any case, government subsidies on fertilizers will be reduced to zero by 1988. If fertilizers cost too much, the farmer would not use them."

#### Seeds

Seeds have been playing a growing role in the expansion of agricultural output. Imported seeds whose use has steadily grown in recent years had a major role in increasing output even though they caused certain problems.

A very small portion of the 500,000 metric tons of seeds used in 1986 was used in the SAP region. At least 200,000 metric tons of the 1.5 million metric tons of seed expected to be consumed in Turkey in 2000 will be used in the SAP region.

Beside private sector investments in this area, the State Production Farm in Ceylanpinar is growing seeds to meet the region's needs.

### Storage

Another infrastructure problem in the SAP region is that of storage. Currently, the Soil Products Office [SPO] has 63 warehouses in the region with a total capacity of 340,000 metric tons. In addition, 8 warehouses with a total capacity of 110,000 metric tons are under construction. It is feared that adequate storage facilities to hold the produce grown in the region until they are shipped to the west will not be built in time.

The SPO which purchased 250,000 metric tons of produce from the region in 1986 is expecting to purchase 500,000 metric tons of grains in 2000. Because it does not have the storage capacity to handle this increase the SPO is looking for a quick solution. The SPO is currently examining a system used in Australia. If this system is endorsed, storage capacity will be expanded at a cost which is 90 percent less than that of the present system.

#### Ports

The export outlets of the produce grown in the SAP region will primarily be the ports of Mersin and Iskenderun. These two ports have a combined capacity of 10 million metric tons a year.

Officials said with regard to the expansion of capacity in these ports:

"We are not contemplating to expand the capacity of these ports by investing in new infrastructure facilities. We will speed up operations by retraining the personnel and by purchasing some advanced machinery. We will thus increase cargo handling capacity indirectly."

Experts criticize this approach on the following grounds:

"If the capacity of these ports is not expanded, they will be paralyzed. Produce grown in the SAP region and other areas will stockpile here."

# Transportation

Existing transportation facilities will be inadequate when SAP invigorates the region. However, the work done so far on this issue does not offer much hope for the future.

The Highways Directorate General is planning to improve only the two-lane highway between Gaziantep and Mardin. The Adana-Gaziantep road will be a toll highway. Experts insist: "This region needs at least 100-meter-wide four-lane highways. Existing roads cannot support massive growth."

The railroad that runs parallel to the border in the region is a leftover from the French colonial period and is about to be shut down. Now a new railroad is planned 60 kilometers further inside the border from this railroad to span Kilis, Urfa and Nusaybin. The 400-kilometer "Euphrates Railroad" will have two tracks and will cost 250 billion Turkish lira.

The SAP region has been completely neglected in terms of airports. The closest airports to Urfa and Mardin are in Diyarbakir and Gaziantep. Plans for an airport in Urfa were included in the 1980 government program but were later scrapped. Experts insist that it is imperative to build international airports in both cities.

# SAP Factsheet

SAP is the largest project in the republic's history and the greatest dream of the 900-year-old Anatolian Turk. This project will harness the waters of the Euphrates and the Tigris, which have flowed aimlessly for centuries, to generate electricity and to irrigate land. Arid lands will burst with abundance as the plains between the Euphrates and the Tigris are irrigated.

- --In terms of availability of water resources, Turkey is ranked second in Europe after Norway. However, we are ranked 16th in terms of utilizing water resources. Turkey is currently utilizing only 10 percent of its hydroelectric potential. Moreover, this country is using only 30 million donums, that is 10 percent, of 300 million donums of irrigable land.
- -SAP, whose construction began in 1977, is made up of 15 dams, 18 hydroelectric power plants and 630 kilometers of irrigation canals. The project will cost, in 1985 prices, 7 trillion Turkish lira, of which 4 trillion Turkish lira will be spent for irrigation components and 3 trillion will be spent on energy components. When the project is completed it will create job opportunities for 3 million people.
- --When SAP is fully operational, it will increase Turkey's annual electricity generation capacity by 70 percent from its current level of 34 billion kilowatt-hours to 57 billion kilowatt-hours. It will also expand the amount of irrigated land from today's 30 million donums to 48 million donums, an increase of 60 percent.
- --Each year, 180 billion cubic meters of rain water drains through Turkey into the sea. This wasted water can potentially be used to generate 110 kilowatthours of electricity a year and to irrigate 90 million donums of land. SAP will harness the rivers of Euphrates and Tigris which carry half of this wasted water.
- --The Urfa Tunnel will be the world's largest irrigation tunnel. It will carry water from the Ataturk Dam to the plains of Urfa and Mardin. The Urfa Tunnel consists of two parallel 26-kilometer tunnels 7.5 meters in diameter separated by a distance of 40 meters.
- --Land distribution in the SAP region is extremely uneven. About 51 percent of the land in the area belongs to large farmer families who form 7 percent of the area's population. Meanwhile, the poorest 53 percent of the population own only 7 percent of the land.

[Box, p 11]

Seeking Solutions Without People and Planning

"If problems could be solved by bringing water, seeds, fertilizers and tractors to the fields, today Turkey would be the world's grainstore. Desired output levels were not achieved in the irrigation projects implemented in the past because the people's education, which is the determining factor, was neglected."

This is how a former director general of State Hydraulic Affairs emphasized the importance of education in the irrigation projects of SAP.

Education remains a serious problem in provinces such as Mardin and Sanliurfa which will be significant affected by SAP. In Mardin, which has a population of 565,000, 45 percent of the men and 81 percent of the women are illiterate.

In Sanliurfa, with a population of 602,000, 47 percent of the men and 83 percent of the women are illiterate. Although these figures are lower in the younger generation, the elderly wield major influence in the traditional family structure of the region. Beside high illiteracy rates, another fact which should not be overlooked is that thousands of people in the region do not speak Turkish and that thousands of others have only a rudimentary knowledge of Turkish from their army service.

A special report on SAP prepared by TUBITAK [Turkish Scientific and Technical Research Organization] says the following on the issue of education:

"The agricultural school in the region must be expanded and affiliated agricultural vocational schools must be established. The farmers of the region must be taught advanced irrigation and farming techniques. In order to ensure the expected growth in output legal requirements must be introduced with regard to irrigation, fertilizer use and seed selection."

9588 CSO: 3554/135

# INCOME DISTRIBUTION, DISPARITY IN DATA COLLECTION

Istanbul MILLIYET in Turkish 15 Dec 86 p 9

["Did You Know?" column by Yilmaz Cetiner: "Richest 2.5 Million, Poorest 2.5 Million"]

[Text] Pity our rich and pity our poor. Of course, the middle class is what remains in between. Is this what we were supposed to become after our leaders and intellectuals wrote, painted and spoke on every occasion for half a century about how incredibly we have progressed economically, socially, artistically, culturally and in every domain of life?

Such a pity. One cannot keep himself from getting sad and longing for the old times when one sees and reads the figures.

The venerable Turkish Industrialists' and Businessmen's Association [TUSIAD]—that is the "big bosses' club"—sponsored a study in collaboration with academics. This nice and well-justified study determines certain facts, but its finding that "the average annual income of the richest 2 million households in Turkey is 4,281,000 Turkish lira" is unsettling. It raises doubts that "perhaps there is a mistake."

Yes, if you divide the average annual income of these "richest" 2 million households, that is 4,281,000 Turkish lira, by 12 you get their monthly income: 366,000 Turkish lira. That money cannot even pay for rent! The homes those people can live in rent for 1 to 1.5 million Turkish lira a month. Even their grocery expenses are far above that amount. A wealthy man can at best buy a coat with that money.

We frequently read that even middle-class people have weddings costing 5 million Turkish lira. We hear that the rich spend 100 to 150 million Turkish lira on a single wedding.

As for the poor and poorest households, the study says that their average annual income is 296,000 Turkish lira. Which means they have a monthly income

of 24,666 Turkish lira. Today, how many families in Turkey have a monthly income of 24,666 Turkish lira? How many families in Turkey can live on that money? Is it not a little unrealistic to reach such conclusions, by saying "these are average figures"?

We also get another odd result: The average annual income of the richest families, 4,281,000 Turkish lira, is approximately 14 times 281,000 Turkish lira, which is the average annual income of the poorest families. If that is all the difference between the richest and the poorest people in Turkey then we should consider ourselves very fortunate.

Either those we consider rich are too poor, or those we consider poor are worse than poor. These are different interpretations of the results.

The study has some other very interesting features.

According to the study, an average of five persons live in each housing unit. In 46.4 percent of all households, only one person works. That is, one person earns a living for five persons.

This is something we frequently encounter, but how accurate is that percentage figure? Because the study has used a very narrow sampling base. For example, have the researchers taken into account the fact that in some large neighborhoods around Istanbul, Ankara and Izmir some households have five and sometimes six persons working, that all of these contribute individually to the families' incomes and that, in addition, their individual expenses are very low?

One wishes that TUSIAD provide greater resources to such valuable researchers so that they can expand the scope of their work and expose the truth. So that everyone can learn where we are and where we are going.

It is so interesting. Fifteen percent of all families have telephones, and 11 percent own cars. It seems that we are still in love with the automobile despite the unattainable prices.

[According to the study] 35 percent of the residents of large cities rent their homes. Also, 77 percent of all households own refrigerators, 20 percent own color television sets and 1 percent own diswashers. In addition, 32 percent the households own washing machines. Apparently a major portion of the women no longer wash and scrub their laundry in the washing basin.

These are all signs of progress toward prosperity. Still, the progress is slow. However, with the incomes reported in the study would it not be difficult even for the rich to buy these conveniences?

What we see is this: Perhaps in Turkey there are not 2 million "very rich" families, but they number no less than 500,000. When one looks around and tours Anatolia they are easily seen: factories, small and large manufacturing operations, trading houses, stores and ranches. Their monthly—not annual—incomes range between 10 and 400 million Turkish lira, nowhere near 366,000 Turkish lira.

Then there are those who earn less than that. These are small businessmen, merchants and industrialists who earn between 4 and 10 million Turkish lira a month.

There are so many people who make millions of Turkish lira out of businesses nobody even thinks about. Such people are never included in studies. It is time that they should.

[Box, p 9] Dr Gungor Uras' Comments

We decided to ask someone who knows these matters. We asked Dr Gungor Uras. Dr Uras said that some parts of the study have been erroneously interpreted in the press. He stated that the report, which he had in his hand, states that the top 20 percent of Turkey's population of 50 million, that is 10 million people, have an average annual income of 4,281,000 Turkish lira and that the bottom 10 million have an average annual income of 296,000 Turkish lira. In addition, the top 5 percent of the total population, that is 2.5 million people, have an average annual income of 9 million Turkish lira. According to the same data, the bottom 2.5 million have an average annual income of 118,000 Turkish lira. Thus the annual average income of the top 5 percent is 76 times that of the bottom 5 percent.

Dr Uras says that the State Planning Organization and Professor Merih Celasun conducted similar studies. The results were compiled using the same methods and were all similar. He says that this is how scientific studies are conducted and these are the results obtained.

9588 CSO: 3554/137 ECONOMIC

# BUILDER RELEASES DETAILS ON ISTANBUL METRO-

Istanbul DUNYA (Supplement) in Turkish 15 Dec 86 p 6

[Text] It has been disclosed that when the Istanbul Light Metro--currently being built by the Swedish firm ASEA and the Building Center Companies Group-is completed, it will provide revenues of nearly \$75 million to the Municipality of Istanbul. It is reported that work on the project, which is expected to be completed in about 4 and 1/2 years, is continuing in accordance with the predetermined program.

In a statement on the issue, Emre Aykar, deputy director general of the Building Center Companies Group, said that the project will be completed on schedule and summarized the ongoing work as follows: "The project is progressing in accordance with the predetermined program. Within that framework, land was allocated at the intersection points of Vatan Boulevard, Kartaltepe and the E-5 highway, and work is under way on the lots that have We have already excavated nearly 150,000 cubic meters of been condemned. earth; in addition, test excavations on the Vatan Boulevard have been Because infrastructure is the most important element of the completed. project, we subcontracted all infrastructure facilities in coordination with TEK, ISKI, IETT and the PTT. We have already started erecting scaffolding and and excavating tunnels on the Vatan Boulevard. In addition, the Ulubati construction site, which will be one of the two main construction sites in the first phase, has been built and is now ready to operate any type of machinery. Meanwhile, foundation studies have been completed, and a major portion of the work conducted jointly with the Bosporus University and the Istanbul Technical University have been completed. Major purchases of basic materials--such as sheeting materials, scaffolding insulation materials, special molds. materials, elastomer support elements and construction steel—have been completed."

Stating that the "Light Metro project will add a new dimension to Istanbul's mass transit system," Aykar continued:

"The Light Metro project spans a heavily-traveled 23-kilometer semi-circular corridor extending from Yenikapi and to Atakoy.

"The first phase of the metro's route, the 7-kilometer Aksaray-Ferhatpasa span, will become operational in 2 years. The full system will be completed

in 4 and 1/2 years. The 23-kilometer track will be served by 21 stations, 35 trains and 105 wagons which will carry about 500,000 passengers a day. The trains will depart every 2 and 1/2 minutes at rush hours and will traverse the full Yenikapi-Atakoy span in 35 minutes including 20 seconds of waiting time in each station.

"The 23-kilometer Light Metro project which will be completed in 4 and 1/2 years will cost an estimated 640 million Swiss francs. Foreign loans totaling 667 million Swiss francs have been secured under very attractive conditions thanks to Swedish government guarantees.

"After paying for operating and personnel expenses, the Light Metro project will provide the Municipality of Istanbul revenues of around \$75 million a year. This amount is more than the payments on the loan the Municipality has borrowed for the project."

Noting that with new revenue sources the municipalities have increased their investments substantially, Aykar said that the division of the municipalities of large cities into district municipalities is a good arrangement because it enables these smaller municipalities to monitor local problems more closely and to better evaluate local conditions. Stating that Building Center is more interested in municipal projects in the Kadikoy region of Istanbul because of its location, Aykar gave the following information with regard to his firm's past and current construction activities in Kadikoy:

"We built five modern shopping areas in Erenkoy, Bostanci, Feneryolu, Goztepe and Hasanpasa, all in the Anatolian part of Istanbul. These shopping areas, which consist of a total of 219 permanent stores and which cost nearly 480 million Turkish lira, feature resting areas, restrooms, security staff booths, daily-monitored price charts and continuous music broadcast systems.

"Meanwhile, since the beginning of 1985 we have been building sealed stone block pavements, special curbs and urban furniture (e.g. concrete seating areas, concrete tables and flower beds) in Yeldegirmeni, Osmanaga and various streets in Kadikoy. So far, 220,000 square meters of streets have been renovated, and 1.5 billion Turkish lira have been spent on this continuing project."

9588

CSO: 3554/139

MILITARY

SERIOUS SHORTFALLS IN AIR, GROUND DEFENSE EFFORT CITED

Bonn LOYAL in German Oct 86 pp 8-9

[Article by Inge Dose-Krohn: "Behind the Lines: NATO's Belgian Partner"]

[Text] Since the Second World War, Belgium has been a strong proponent of NATO as one of its founding member nations, and has followed a policy of collective security. Belgium's contribution to the defense of NATO member nations consists of the defense of a roughly 60 km wide strip on the border between the Federal Republic of Germany and the German Democratic Republic, approximately on a line between Goettingen and Bad Hersfeld. Belgium's role as a nation among its allies is as a "behind-the-lines" area for NATO forces in central Europe.

As a member of NATO therefore, Belgium has a number of different responsibilities. It must ensure the security of its own territory. Although that responsibility applies to the military of any country, Belgium's military forces, however, are only 100,000 strong including civilians, of which approximately 60,000 are army soldiers. Of these, 20,000 are career and longterm servicemen and women, and 10,000 are conscripts who are stationed in the Federal Republic of Germany. If needed, Belgium could supply an additional 180,000 reservists who would join the active military in the defense of an area only one eighth as large as the Federal Republic of Germany. On the other hand, however, Belgium's ground forces are required to keep the allies' supply routes open. These include not only streets, but airports and seaports which would be used by the allies to resupply their troops. The air forces provide support for the army in the accomplishment of this task, and must of course also protect the air. The intended objective of the navy is to escort ship transports in the Atlantic, as well as to perform minesweeping tasks within its own territorial limits and in the English Channel.

This is also a behind-the-lines area for the allies in that it provides storage space for material and supports forward troop movement. In addition, not only is the main NATO command post located between Mons and Casteau in the specially-planned town of SHAPE (Supreme Headquarters, Allied Powers Europe), but in addition to this highly military European NATO facility, the European counterpart—the international staff and the Military Committee—are headquartered in Brussels. However Belgium, bounded by the North Sea, is having its share of problems with its military forces. These problems have

resulted in large part from a decrease in the defense budget. In the 10 years from 1975 to 1985, the defense budget, expressed as a percentage of the overall budget, has dropped from around 7.0 to 5.6 percent; last year only \$290 was spent per capita. However a comparison with French and West German expenditures, for example, would not be significant due to the greater number of forces involved.

These financial difficulties have caused the number of Belgian NIKE-Hercules sites to be reduced from eight to four in recent years. The former Defense Minister, Freddy Vevren, was thus able to save around 30 million Belgian francs (DM 1.5 million) per battery, and also wanted to withdraw the remaining four sites. This intentional hole in the air defense net was cause for a great deal of concern within NATO, because plans had also been made to remove six HAWK sites which were directly on the border between the Federal Republic of Germany and the German Democratic Republic. And the American PATRIOT, the descendant of the long-antiquated NIKE which was developed in the 1940's, did not have a chance of being stationed in Belgium before 1988 due to insufficient funds. There were also personnel problems in addition to financial ones: Fewer and fewer enlistees signed up for military service, and more and more conscripts were taking advantage of the possibility of alternate service. Thus in spite of high birth years, quotas could not be filled. Here, too, money was a primary reason: A Belgian conscript receives only 75 Belgian francs (approx. DM 3.50) per day. His term of service is eight months if he is stationed in the Federal Republic of Germany, ten if stationed at home.

At the beginning of 1985 Belgium's new Defense Minister, Francois-Xavier de Donnea, put together a catalog of budgetary measures, the purpose of which was to ensure that Belgium can continue to fulfill its responsibilities to its allies, however Belgium was only 45 percent successful in its effort in terms of the NATO average. The possibility of alternate service is now to be curtailed, and an incentive is to be created in order to attract a greater number of female enlistees. De Donnea has also considered lengthening the term of service. Training is also to be improved, and soldiers are to be sent on more frequent exercises.

Although these efforts will be slowly realized over time, evidence of their implementation is already in evidence today, even though the government's "White Paper on National Defense" published in the fall of 1985 still sounds a pessimistic note, and troop readiness is in danger.

Army soldiers serve for only 22 of the 60 days of exercises prescribed by NATO, whereby the Belgian military poses the question of whether only those days of a 14-day exercise are to be counted during which combat maneuvers are practised from the battalion level upward; whether smaller exercises which take place at the company level, field training or preliminary and subsequent required technical service with weapons and equipment ought to be equally counted.

These problems can be delineated in more concrete terms using the air force as an example. According to the white paper, Belgian pilots flew an average of only 145 hours per year as opposed to the NATO average of 240.

With regard to missile systems, the white paper indicates that Belgium cannot afford the PATRIOT. Here, the government has offered a compromise: It will agree to supply personnel for and maintain the system, however the six HAWK batteries and the remaining NIKE-Hercules sites must stay. Sixteen of the 24 cruise missiles to be stationed as called for by NATO were put in place during 1986. Belgian pilots are also now flying an average of 160 hours. It is hoped that in 1987 this average will be increased to 180. Compulsory military service is also to be increased in 1987. Accordingly, the term of service of Belgian recruits serving at home is to be increased to 12 months, and the service requirement of personnel serving in the 1st Belgian Army Corps in the Federal Republic of Germany is to be increased to ten months.

Even notwithstanding the low birth years under King Baudouin, Minister de Donnea would like to see a near-term increase of at least 4,500 in the number of young Belgian recruits, and would later like to see an extension in the term of service under certain circumstances. A number of social measures are intended to make military service even more palatable.

There has already been an increase in maneuvers, and intensified combatoriented training within the army in order to gradually raise military capability to the level required by NATO. The level of training of the members of the 1st (BE) Corps in this regard is perhaps somewhat higher than that of Belgian forces in general. Disregarding large-scale annual fall maneuvers such as CROSSED SWORDS which is currently under way, these personnel are involved in a number of large and small West German maneuvers, and also make frequent use of NATO's Vogelsang, Bergen and Sennelager training areas. In many respects, they are as well equipped as West German soldiers. Among other materiel, the Belgian Army uses the LEOPARD 1 tank, the 155-mm M 109 A2 howitzer, the GEPARD, the M 113 armored personnel carrier and the MILAN.

The Corps stationed in the Federal Republic of Germany consists of two divisions, which in turn comprise two brigades each. In the event of a need for national defense, one reserve brigade each would be added to these divisions. In such a case, the 1st (BE) Corps would be subordinate to the Commander of the Northern Army Group (NORTHAG), which in turn would make up part of the Allied Forces, Central Europe (AFCENT).

The majority of reservists, however, would be used for Belgian defense and supply purposes. They all must serve for eight years. In the case of special forces, this term of service can be extended up to 15 years. There are, however, personnel gaps among the reservists, and the military must come up with some sort of stop-gap measures. Belgium is on the whole making an attempt to consolidate the defense budget in such that it is best able to contribute to collective security.

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CSO: 3620/122

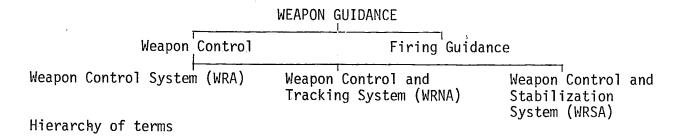
TANK WEAPON CONTROL, STABILIZATION SYSTEMS ADVANCES REVIEWED

Bonn WEHRTECHNIK in German Jan 87 pp 30-35

[Article by Henning Huebner: "Electric Weapon Control and Stabilization Systems"]

[Text] An essential component of weapons systems for modern combat and support vehicles is weapons control; here, weapon control is to be understood as a supervening concept for firing guidance and weapon aiming. While the tasks of firing guidance are accomplished with equipment and devices for aiming as well as for supplying data and weapon alignment (tangent elevation and lead), weapon alignment is understood as the equipment and devices for aligning and holding the weapons in the desired position. Senior construction officer Dipl. Eng. Henning Huebner, in the WM (Naval Forces) Department of the BWB (Federal Office for Defense Technology and Procurement) Committee for Weapon Control and Stabilization Systems, first makes some basic remarks, and then discusses especially the use of weapon control and stabilization systems (WRSA) in battle tanks, because this context imposes the most stringent requirements on these systems. Special attention is paid to electric WRSAs, which promise advantages for future battle tanks. At the present time, several electrical WRSAs are being developed and tested in the Federal Republic of Germany.

The difference between a modern weapon control system (WRA) and a control and stabilization system (WRSA) is based solely in the feedback sensor. With the WRSA, the angular speed is measured inertially with a gyro; but the weapon control system feeds back only the weapon speed relative to the carriage.



The control and tracking system WRNA follows the control signal through an optical system that is connected in between, and thus is a slave system to the aiming unit. The feed-forward (FF) element is used solely to increase the reaction speed.

Now tracking makes it possible to use a special circuit as an artifice, which can substantially reduce the error in weapon alignment and thus can decisively increase the hit probability of a battle tank. This circuit compares the position of the weapon with that of the guiding/aiming unit and a firing authorization is issued only when the weapon is in coincidence (agreement) with the aiming unit or a rigidly prescribed firing window. Still other circuits are known to reduce the miss rate still further, and these can also be used for self-stabilized weapon systems.

As a component of the entire turret/weapon system, the tasks of a WRSA/WRNA are derived from the main purpose of the battle tank, namely to fight enemy armored point targets in all three types of combat, at large distances, both from stationary concealment and when running:

To follow the leading optical system from the minimum fine-control speed to maximum control speed (speed ratio about 1:4000) as free from delay as possible and with precision, and to control the weapon primarily in this range;

to run into coincidence with the guiding optical system with an optimal time, from arbitrary elevation displacement and lateral displacement;

while moving, to decouple the weapon from the turret as regards its elevation, and to decouple the turret from the hull laterally;

to guide the weapon into its final elevation under speed control;

to preserve the system from self-destruction on the basis of contour limiting;

if the primary power source should fail, to make possible emergency operation;

to allow safety elements to become effective, which - in the event that the WRSA fails - prevent uncontrolled turret/weapon motions.

Besides these technical tasks, the development of WRSAs must also take into account tactical boundary conditions as well as vehicle- and system-related boundary conditions, such as the deployment area, connection with firing guidance, space requirements, weight, cost, reliability, etc.

Factor	Weightings	Hydraulic WRSA	Electric WRSA
Costs	0.2	0.2	0.229
Logistics	0.15	0.15	0.204
Technical features	0.34	0.466	0.393
Ergonomy	0.1	0.085	0.12
Integrability	0.13	0.13	0.132
Development potential	0.08	S. 0. Q6	0.12

Comparative Study of WRSAs

Until about the middle of the 70's, electrohydraulic WRSAs were far superior to electrical drives that had been developed by that time, in virtue of their

lower weight smaller volume higher reaction capability (broader guidance/noise frequency response) clearly better reliability (such as e.g. in comparison with the flak (antiaircraft) tank GEPARD)

Unfavorable factors for the electrical drives were primarily the machine amplifiers such as Metadyne, which now have been replaced by transistor amplifiers.

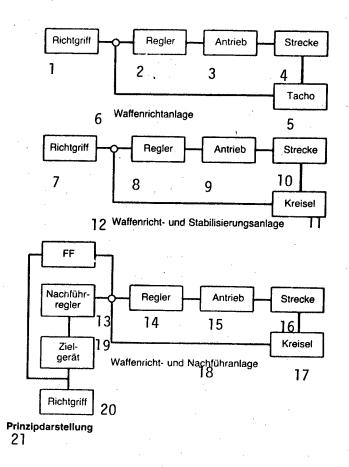
In the course of the rapid development of semiconductor technology, it became possible, beginning in 1975, to produce electrical final power stages based on transistors, for the required current/voltage range. In the beginning, the final stages still had to be equipped with several transistors connected in parallel in order to furnish the required power. But the number of parallel transistors fell considerably in the course of time; at present, it is possible to procure complete final stages as finished modules.

The first EWRSAs with a fully transistorized final stage were developed and subsequently tested in 1975 by General Electric and AEG for the LEOPARD 2 K prototype 04.

In 1979, the time had come to compare the purely electric WRSA with an electrohydraulic WRSA. The LEOPARD 2 prototype 14 MOD with a 120 mm weapon system was available as a test system.

In simplified form, the following final comparative result was obtained between the electrohydraulic and the purely electric WRSA:

The table (above) reflects the development circumstances in 1979. Only the point concerning development potential indicates the performance capability which is still inherent in the electric drives, and which at that time became noticeable primarily in a drastic reduction of volume and weight in comparison to the electrical system that was used in the comparative study. At that time, the weight and volume were only insignificantly less than those of the hydraulic



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    weapon control and stabilization system
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    weapon control and guidance system
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drives; but at this time, the picture looks still much more favorable for the electrical WRSAs. Drives were evaluated on the basis of an intensive theoretical and practical test with the participation of the ErpSt (experimental station) 91 of the Federal Armed Forces, the systems firm Wegmann, and the participating technical firms.

Already at that time, the electrical WRSAs emerged dominant in all features compared to the electrohydraulic drives. Only the point concerned with technical features favored the electrohydraulic WRSAs. But here, too, it must be recognized that the performances of the electrical WRSAs already exceeded the official requirements, as a comparison with the weighting shows (performance/weighting greater than one).

The result of this comparative study now formed the basis for increased activity in the area of electrical drives. In particular, the advantages and disadvantages of electrical WRSAs, which were recognized in the comparison study, were now examined much more closely. In comparison to hydraulic WRSAs, the following features were confirmed for operation with electrical WRSAs in the overall system of the battle tank:

Advantages of electrohydraulic WRSAs

Better technical performance characteristics with specially optimized individual vehicles. A special factor favoring electrohydraulic WRSAs here is the very small moment of inertia of the positioning cylinder and hydromotor in comparison to the spindle drive and electric motor. However, these features cannot be transferred to standard combat vehicles that are used by the troops, since this optimized condition is not attainable in the course of mass production under reasonable conditions and furthermore because it also could not be maintained during deployment.

Less power consumption in the operating mode "holding the turrent at a slant". With purely electrical WRSAs, the current load is proportional to the imbalance and thus to the slant. To this must be added the poor efficiency of the electric motor at low angular speeds. By contrast, hydraulic drives practically need no power, since the hydraulic valves have a blocking action. In summary: for embankment tanks, one should use only hydraulic drives.

Advantages of purely electrical WRSAs

Low power requirement. For running in open terrain, on the average, they require only 3 percent of the power that is used by hydraulic drives for stabilizing the turret-weapon system.

Low start-up currents. The pump motor of hydraulic WRSAs, when starting up with currently introduced battle tanks, requires several times as much current - to secure the performance capability of these drives - as the electrical WRSAs require during start-up. The statement that the onboard power supply is stressed by the electrical WRSA is consequently simply wrong. Precisely the opposite is true: Hydraulic WRSAs stress the onboard power supply more severely.

Low weight and volume. An electrical WRSA weighs about 85 percent of an hydraulic WRSA, and its volume is only about 28 percent (example KPZ (battle tank) LEOPARD 2, status 1986). In this connection it should also be noted that the volume required by the electrical WRSA is less than that of the hydraulic drives (with hydraulic power supply), not only as a total package but also and especially the indivividual components for lateral and elevation aiming are smaller than the comparable hydraulic modules.

Constant technical performance in the entire deployment range. The parameter variation of the control range of electrical WRSAs is significantly smaller than that of the hydraulic drives. One need only think about the viscosity differences in the hydraulic fluid within the temperature range under consideration, or the variable spacing relationships when exchanging modules.

Improved on-watch operation as a result of reduced electrical consumption and especially noiseless operation of the drive.

Low mass-production costs. The mass-production costs of electrical WRSAs are about 80 percent of those for comparable hydraulic WRSAs.

Lower use costs resulting from

- the use of industrial "off the shelf" subassemblies.
- The general absence of maintenance work (electrical WRSAs require only 16 percent of the labor compared to hydraulic WRSAs).
- Simple fault detection, localization, and removal.
- Easier integration and greater service friendliness.

Higher reliability. Recent studies confirm the significantly higher reliability of electrical WRSAs.

We only point out here the combustibility and toxicity of the hydraulic fluid. The presumed detour to fire-resistant hydraulic oil entails poor dynamical behavior.

Deployment of Electric Drives

The results of the comparison study, performed in December 1982, now form the basis for a broadly conceived development of electrical WRSAs. At that time, the entire applications area of electrical drives had to be demarcated. For this reason, various systems were constructed and tested from the copious supply from the German manufacturers, in order to verify their deployment with combat and support vehicles, from the gunner combat vehicle through the battle tank, up to the flak tank, while subjecting them to the highest performance requirements (lateral aiming power above 100 kW - a few percent of this is sufficient for the battle tank):

All the systems in their respective applications area could be verified in this way completely satisfactorily.

(Constructed and tested systems: see table below)

Combat vehicle

WRSA from:

gunner vehicle battle tank

Honeywell, Maintal, IBP, Ettlingen AEG, Wedel, BBC, Mannheim, Honeywell,

Maintal

flak tank

Honeywell, Maintal

The structure of Electrical Weapon Control and Stabilization Systems

The term electrical weapon control and stabilization system (operational term EWRSA) covers more than a mere assemblage of motors, controls, amplifiers, and drives. Electrical weapon control and stabilization systems, with their multiplicity of structure, flexibility as regards interfaces, and the technological potential of their electronics, provide precisely the correct response to the overall system needs.

This multiplicity of structure is stamped by the tactical task and by the technical requirements resulting from it, as well as by vehicle-specific boundary conditions. The latter affect particularly the driving technology and the power electronics.

The available space plays an important role here. For example, it determines the lever geometry, the height of the effective lever arms. On the other hand, the weights, moments of inertia, eccentricities of the turret and weapon affect the choice of drive technology.

The largest torques, such as may be necessary for flak tanks, can be transferred purely electrically with less wear by means of a drive integrated into the race ring than mechanically by a pinion-race ring solution.

In precisely the same way, the required torques also limit the deployment of 24-volt d.c. technology. In general, for a given deployment profile of a WRSA, the power requirement of these systems rises with the torques that are impressed by the weapon system. Thus, a limit is soon reached at which it is no longer appropriate to remain at this low voltage level. Determining factors are:

EMV (electromechanical compatability) strength of the weapon system Losses in transmission to the load Switching and pass-through losses in the power electronics Current semiconductor technology.

The current German battle tanks have not yet reached this limit. But the limit is not very far ahead. In France, the development of the battle tank LECLERC clearly displays the transition from low-voltage technology to a high-voltage

system for the control and stabilization systems (L'USINE NOUVELLE No 20, 15 May 1986).

What is conceivable for future battle tanks already exists with flak tanks, despite occasional misgivings about higher voltages.

With the present state of the art, striking advantages accrue to high-voltage systems, and there especially for three-phase drives, as compared to transistor-equipped 24-volt power electronics.

High energy feedback
Cheap and reliable switching elements (thyristors)
Reduction of components
Considerably lower losses
Compact mode of construction
No switching pulses and consequently better EMV
More economical and reliable.

Brief Description of Existing EWRSAs

Consequently, the presently available drive variants will be presented below by way of example.

Transmission-bound Power Transfer

The drive technology developed by AEG, Wedel, is based on a 24-volt d.c. supply and an analog control. This can be equipped with an available mil-bus interface 1553B for integration into digital firing guidance systems.

The modules of the drive are:

A lateral aiming drive with the submodules

- lateral aiming gears with a pinion for engaging the turret race ring
- equalization of backlash to compensate production tolerances of the teeth on the turret race ring and the race ring bearing
- d.c. drive motor
- a brake for holding the turret when the drive is switched off, with load limiting to protect the teeth of the race ring
- a manual drive, without feedback, to move and aim the turret with hand cranks when the onboard power supply is switched off or in emergency cases.

Elevation aiming drive with the submodules

- spindle transmissions with gear reducer units in backlash-compensated and low-friction design with high efficiency in driving and braking force direction
- d.c. motor
- brake to hold the weapon when the drive is switched off, with load limitation to protect the linkage structures

- a manual drive, without feedback, to aim the weapon when the onboard power supply is switched off or in emergencies.

Power electronics, designed as a pulse-width modulated transistor power amplifier with current regulation, protective equipment, BITE test circuits, and EMV filter.

Control electronics, consisting of a modular system of control, supply, and regulation modules.

Control handles, sensors.

This drive technology, which is also represented by Honeywell Company, Maintal, is currently developed the furthest and is practically ready for mass production. The drive from AEG is additionally passing extensive technical trials in the LEOPARD 2, with excellent results. The deployment range of this drive technology extends from light weapons to battle tanks of the size of LEOPARD 2.

Honeywell produced an EWRSA for especially high powers, using the same drive technology, but with a digital control and a 115 volt three-phase onboard power supply.

A recirculating ball screw with high positioning accuracy transmits the force to the weapon.

The turret drive is connected to the race ring via a low-inertia planetary stage. Variable profile displacements of the teeth as well as pressing in the transmission through spring packets reduce the backlash to zero.

A central component of the weapon control and stabilization system is the microprocessor-controlled digital control system. With its adaptive control, it makes possible a good stabilization quality independent of parameter fluctuations. Proof of this has been furnished by a test in the LEOPARD 2.

A digital interface makes possible direct coupling to and communication with the remaining components of a digital firing guidance system through the mil-bus 1553B.

Transmission-less Power Transfer

It is expected of present-day modern control and servo systems that they can be activated very sensitively over a wide rpm range. This is usually implemented technically by controlling the power of an electric motor, which acts on the weapon system through a transmission.

The drive concept of the decoupled, control and servo drive ERNA, developed by the Pietzsch group and implemented in various applications, proceeds along a different route. An ERNA and its basic structure consists of two components:

The power generator makes available the primary power, also called the support power, which is only roughly matched to the need. As a rule - especially with heavy weapon systems - this is a roughly rpm-controlled electric motor that runs in only one direction. This motor directly or through intermediate gears drives the actual servo element, the

torque generator.

The torque generator consists of two electromagnetic couplings, whose primary sides rotate continuously and in particular in opposite directions. One of the couplings generates a right-directed torque, and the other one a left-directed torque. Both torques can be regulated individually by changing the activating current of the electromagnets. Thus, it is possible to dispense with a reversal of the direction of rotation of the drive motor:

The division into two oppositely acting torque lines obviates the otherwise necessary measures against transmission-less systems. The changing torques that are necessary to compensate dynamical disturbances of the weapon system are generated by activating the corresponding couplings and not by changing the direction of rotation of the drive motor. Thus, the dynamics of the drive is limited only by the excellent dynamics of the couplings.

The drives from Pietzsch Company have likewise been designed for the use area with 24-volt d.c. supply. Various tests in gunner tanks always exhibited good performance.

Another variant of transmission-less driving technology has been developed by BBC Company, Mannheim, under the name DIANA (directly driven servo and stabilization system).

About six years ago, the idea of a direct drive was taken up and was investigated for its suitability for stabilization, control, and tracking tasks.

The key component of a direct drive is the ring motor. With a turret drive, this consists of the integral components: turret pivot-bearing, motor, and gear rim. The ring motor is installed and handled in the same fashion as the usual turret bearing. For 24-V onboard power supplies, the same d.c. construction has proven suitable. Here, the excitor magnet and the brushes are situated on the downwardly extended inside ring of the turret pivot-bearing, and the coils are disposed opposite to the outside ring. The accelerating and braking torques arise uniformly along the entire circumference. The gear rim seals the motor ABC-tight and is needed only for the manual drive, for standstill, and for lashing.

The same technique in a ring-segment construction-mode can be used in the future for the elevation drive. However, an electric spindle drive is used for structural reasons of existing connecting structures.

Particularly low-loss power electronics were developed for the finely-regulated supply of the ring motor and of the elevation servo motor. The electronics are identical for both axes. It is constructed as a double four-quadrant actuator in field-effect transistor technology (MOS-FET). In contrast to the bipolar

transistors, the control losses of the FET are incomparably low under all operating conditions.

A freely-programmable microprocessor is integrated into the housing of the double-four-quadrant actuator. It controls the power stages, monitors the function, limits the currents, down-controls in case of excess temperature due to improper handling, and outputs all the desired status variables through a BUS interface. The interface to the servo control can be optionally digital or analog.

A sample of the directly driven servo and stabilizing system DIANA is currently being installed in a LEOPARD 2 and will subsequently be tested. This technology is not only limited to a supply from the conventional 24-V d.c. onboard power supply, but is predestined for use with a three-phase supply with higher power.

Future perspectives.

Electric weapon control and stabilization systems have been developed in the Federal Republic of Germany since 1975, continuously, for all combat and support vehicles. Thus, systems arose for gunner tanks, gunner cars, battle tanks, anti-helicopter vehicles, and drives for the highest performance requirements as with the GEPARD. The technologies for analog controls, d.c. and three-phase power supplies, with their effects on power amplification, have been considered very intensively and carefully, and can be deemed practically ready for mass production.

The mature technology and the proven superiority compared to hydraulic weapon control and stabilization systems practically mandate their deployment with current programs for increasing the combat value as well as with future combat and supply vehicles.

The objective of further development of purely electrical weapon control and stabilization systems is to modularize the drives in such a fashion that mutually coordinated modules, as similar as possible, will be available for the WRSAs, so that the entire application spectrum can be covered with available and tested components. Through the universality of the components, such standardization will achieve low production and utilization costs in actual use, as well as high reliability.

For example, the logistical supply of the different hydraulic WRSAs in the battle tanks LEOPARD 1 A2/A3, LEOPARD 1 A4, LEOPARD 1 A5, and LEOPARD 2 would be reduced from the present four WRSAs to a single electrical WRSA with more constant and technically superior performance. This EWRSA requires only minimal adaptation work to the respective battle tank system, and it thus offers a maximum degree of commonality. Such equipment, by obviating the bulky hydraulic power supply, provides another benefit free of charge: space for other measures to enhance combat value.

A concomitant component of the standardization program also is the investigation of digital control procedures, to reduce the multiplicity of analog controls and their association with the turret/weapon system.

Another point that development needs to emphasize is improvement of the already good technical performance and here particularly the stabilization quality so as to fulfill optimally special tasks such as beam tracking.

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CSO: 3620/147

NEW ENGINEER UTILITY BOAT ENHANCES RIVER CROSSING CAPABILITY

Bonn WEHRTECHNIK in German Jan 87 pp 22-23

[Article by Rudolf Helmich: "Motorboat 3"]

[Text] System-inherent weaknesses between the pushboat and the floating bridge have repeatedly provided the decisive motive for the development of new engineer utility boats. The basic requirements for the new Motorboat 3 with trailer were increased shallow water mobility as well as faster launching. Sharing the credit for the positive outcome of the development is the new rudder pump drive. With the Motorboat 3, the operational limits of the collapsible floating bridge equipment can be fully exploited, as described by construction chief Rudolf Helmich, section chief for amphibious equipment and engineer watercraft in the KG department of the Federal Office for Military Technology and Procurement.

With the Motorboat 3, an engineer utility boat is thus being introduced for the third time. Its predecessors are the large Motorboat, and the small Motorboat. Considering the fact that both boats score high in performance and mobility, there must have been special reasons for the development and introduction of new boats.

The mission of the engineer utility boats is varied: reconnaissance, security of waters, rescue operations, salvage work, diving operations. The primary mission, however, was and is the utilization as a pushboat for assigned military floating bridges and ferries in the predominantly shallow inland waters.

Weaknesses in the Boats Used to Date

Nothing underscores this state of affairs more than the fact that it was the weaknesses in the system compatibility between floating bridge equipment and utility boat that were frequently the decisive reason for the preparation of new tactical requirements and for the development of new boats:

-- First generation: Hollow deck floating bridge equipment and large Motorboat.

### System Weaknesses:

Since the weight of the boat is many times greater than that of the hollow deck pontoons, a crane with substantially greater load-carrying capability must be employed to get it into and out of the water.

The draft of the boat is also substantially higher than that of the hollow deck equipment and thus significantly limits its mobility in particularly shallow water sectors and near the shore.

Requirements resulting from this: A boat with appreciably less weight and smaller draft is needed. Following detailed investigations, it is in fact possible to select a suitable boat and introduce it. In the meantime, however, the floating bridge equipment assigned had also undergone a change:

-- Second generation: Collapsible floating bridge and small Motorboat.

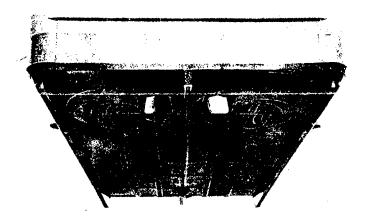
Following a period of practical formation training, system-inherent weaknesses were again uncovered:

When used with ferries in flowing water of limited cross section, the small Motorboat requires a water depth of about 1.5 m; once again the boat turns out to be the limiting factor. In the construction of ferries and bridges, the boat is the first of the bridge elements that must be let into the water, but requires substantially more time for this purpose than the bridge elements per se. The boat thus has an adverse impact on the tactically significant time span required for the preparations for bridge deployment.

Requirements resulting from this: A motorboat expressly suited for shallow water operation must be developed. Its transport on land is to be so planned that it can be launched and retrieved from the water just as quickly as the sections of the collapsible floating bridge.

These two requirements were decisive for the development of the Motorboat 3, even though a number of other, previously valid requirements also had to be considered.

The initial optical impression is one of surprise because of the unusual exterior shape of the boat. The dimensions of the nearly rectangular hull are determined by [the result of] the transport features already familiar to us from the collapsible floating bridge. This includes particularly the rails along the sides, visible when looking underneath the otherwise smooth bottom. Thanks to the pulley rails and the three-point interlocking system, loading for transport, launching, and retrieval from the water can be carried out quickly and reliably, as has been the case with the collapsible floating bridge in the past.



Plainly noticeable on the flat bottom of the boat are the side rails as well as the absolutely flush-mounted rudder pump units installed at the stern.

## New Special-Purpose Trailer

So as not always to have to rely on the relatively expensive bridge transporter, a trailer for the Motorboat 3 was simultaneously developed. This special-purpose trailer with tandem axle and dump body is an essential component of the overall successful development. The slip and interlocking system has been designed in such a way that boats can be raised from the ground like bridge sections and transported. Launching and retrieving the boat from the water is carried out quickly, as with a truck.

#### Water Jet Propulsion

The key component for the solution of the problem, however, is the water propulsion. The selection of two rudder pump drives of type SPJ 55 was completely vindicated in the course of development with respect to the performance expected of them.

A look under the boat's bottom shows the two jet propulsion units absolutely flush-mounted at the stern. They suck in the water from below, feed it through a spiral chamber, and then eject it again at an accelerated speed through 360 degrees and in this way generate maximum thrust in every desired direction. Particularly the shallow water suitability was emphatically confirmed by the drives during testing. The boat can be utilized at depths of 60 cm and more, it glides across shoals of 30 cm depth, and it requires a water depth of only 80 cm when utilized at full power in ferry operations. Its influence on the trimming of the ferry formation in shallow water is better than that of propeller boats.

#### General Technical Design

The boat hull has a pontoon hull and consists of welded salt water-resistant aluminum alloy AlMg 4.5 Mn. Rails and fenders are of extruded sections.

A direct steering reversal from "ahead" to "astern" is possible, with the drives turning in opposite directions, so that there is no thrust to the side. The engines can be removed from above both on land and in the water. Even with the loss of one engine, the boat can be operated and steered. Only a slight danger of contamination and damage to the running wheels was demonstrated. Divers run no risk of injury even in close proximity to the drive units.

The hull is divided into three watertight compartments, which can be individually pumped out by electric bilge pumps.

The wide bow simplifies the engagement of the collapsible floating bridge sections. Lashing is simplified and speeded up by hydraulic rope winder mechanisms.

# Approval for Introduction Given

The Motorboat 3 with trailer, after a year of jointly conducted trials and service tests, which included all important and characteristic waters of the FRG, was able to demonstrate that it could fulfill the tactical requirements. Approval for introduction was therefore given in June 1986. For the first time, a water jet drive was thus introduced for army equipment. It shares in the credit for the good shallow water properties achieved and the quick launching and retrieval of the boat. For the first time, the boat does not determine the performance limits of the floating bridge equipment, but rather makes full use of its operational limits.

#### [Boxed item, page 23]

Overall length	7.00 m 3.26 m
Overall width	1.40 m
Height of side Draft at the stern, position of rest	0.46 m
Weight, equipped and fueled	4,900 kg
Pile thrust	22 kN
Driving thrust at 10 km/h and 4 m water depth	16 kN
Two diesel engines, air-cooled	each 131 kW
,	at 2,500 rpm
Two rudder pump drives SPJ 55: Shaft diameter	1,300 mm
Rotor disk diameter	500 mm
Traverse time for 180 degree jet reversal	2 sec
Time required for launching in water	2 min
Time required for retrieving from water	5 min
Maximum sheet piling height when launching	2.5 m

12689/9599 CSO: 3620/150 MINE WARFARE FLOTILLA'S MISSIONS, CAPABILITIES REVIEWED

Koblenz MARINE-RUNDSCHAU in German Nov/Dec 86 pp 344-350

[Article by Helmut Spieker, Dietmar Schreck and Joerg Auer: "Mine Warfare as a Component of German Fleet Operations"; first paragraph is introduction]

[Text] The deputy commander of the Mine Warfare Flotilla (A-3) and two squadron commanders discuss in their joint article the mission and responsibilities of this—in numbers of components—largest unit afloat. Its many operational resources are presented, and the future necessity for, and importance of, mine warfare forces are especially emphasized.

For the defense of the German Baltic coast and the approaches to the Baltic, a defensive system echeloned in depth and with a multiplicity of various potent and complementary naval resources is necessary. These naval resources must be capable of warding off attacks upon our territory and of preventing the passage of Warsaw Pact ships through the straits. Of course, they must also stand up to the threat which results from the geographic proximity of the Warsaw pact's territory and thus of its armed forces.

Such armed forces are also mine warfare forces.

The North Sea, with its harbors and landing areas, is important for intra-European sea transport and is a part of the sea-lanes from North America to central and northern Europe. In a crisis and in war, vital supply shipments for the populace as well as absolutely essential NATO reinforcement and resupply shipments will come via the North Sea. The protection of the North Sea and the local shipping is therefore an absolutely essential prerequisite for successful forward defense in central and northern Europe. Various effective naval and naval aviation forces are necessary for this protection.

Such armed forces are also mine warfare forces.

Baltic Sea Mission: Minelaying

The German Navy's mine warfare forces are combined in the Mine Warfare Flotilla whose squadrons and units, in their mission, equipment and training, take into account the various concepts for the Baltic Sea and North Sea cited above.

In the Baltic Sea the primary mission of the 45 ships and craft stationed there is minelaying.

Building up (that is, coming to a full complement, taking charge of mines, proceeding into a mine field, and laying of defensive minefields in co-operation with and under the protection of fast patrol boats and naval fighter-bombers) is an ever-recurring training goal of the Mine Warfare Flotilla's four Baltic Sea squadrons.

For these units mine countermeasures are only a secondary mission which, depending upon the situation in certain areas, can become necessary to maintain or restore freedom of maneuver. It is the goal of such a mine countermeasures mission to keep open the lanes between friendly fighting units and their support units.

The secondary mission—that is, mine countermeasures—can also be performed in the North Sea.

To the same extent, a few of the German minehunters in the Baltic Sea are available for mine countermeasure missions in the above sense. Mine countermeasures operations in the Baltic are augmented by mine clearance diver operations groups which operate from land or sea, primarily in areas where, because of narrow spatial confines, other mine countermeasures operations units could not function.

Mine Countermeasures in the North Sea

In the North Sea the mission of the 19 ships and boats as well as the remote-controlled, unmanned minehunters—the "Seals"—stationed there, consists of mine countermeasures operations.

The recording of all relevant geophysical parameters in peacetime to make mine countermeasures operations simpler and above all faster by a base line comparison, is the ever-recurring task of the 12 minehunters presently in this operational area. Conditions on the ocean floor, underwater obstacles, underwater objects, sound propagation and currents are recognized, documented, analyzed and worked up.

On the basis of this collected data the proper approach for the naval commander can be determined and for the squadron commander, the proper use of mine countermeasures units—that is, the "optimum mix"—a combination of minehunters, of "Troika" or other conventional minesweepers, and of mine clearance diver operational groups.

Modern "System Units"

After the conversion of the 18 Lindau Class coastal minesweepers in the 1970's, the Mine Warfare Flotilla of the 1990's will have, by the construction of 20 boats of the so-called standard weapons carrier type, an entirely different profile than that of the Flotilla of the 1960's or 1970's. From the traditional minesweeping operations of World War II the Flotilla has developed into a formation of—as one so charmingly says today—"system units."

The Mine Warfare Flotilla of the 1990's will have the following operational resources at its disposal and will be organized and stationed as follows:

- --The 5th Minesweeper Squadron, with 10 new versions of the 343-Class fast coastal minesweeper and the tender MOSEL, will be located at the Olpenitz Naval Base. The new vessels will bear the names of cities and will start arriving in February 1989;
- --The Mine Clearance Diver Company with a total of six mine clearance diver operational groups and mine clearance diver boats will continue to be stationed at Eckernfoerde Naval Base;
- -- The eight 393-Class minesweepers will remain at the Kiel Naval Base and form the 3rd Minesweeper Squadron;
- -- The 7th Minesweeper Squadron with 10 394-Class minesweepers will remain at the Neustadt Naval Base; and
- --The 6th Minesweeper Squadron with six "Troika" systems--that is, 351-Class --as well as the tender WERRA, will remain home-ported at the largest German naval base, Wilhelmshaven.

The 10 331-Class minehunters, together with the tender SAAR and the two mine transports STEIGERWALD and SACHSENWALD, will make up a squadron. Likewise the 10 new 332-Class minehunters which will also receive city names.

After their supply phase (1992-1994), both squadrons will be restationed at two separate naval bases.

All in all, the Mine Warfare Flotilla in the 1990's, then with a total of 61 ships and boats and, further, about 3,000 officers, NCO's and men, will continue to be responsible for the mine warfare component of the German Fleet's conduct of operations.

Mine warfare will then too be an element of naval warfare which can only be planned and conducted in connection with the operations of the fleet's other naval and naval aviation forces and which will support the commander's operational direction and contribute to the fulfillment of the overall mission.

Use of Mines in the German Fleet

#### New Dimensions

If the mine, until just recently and apart from certain exotic types like floating or creeping mines, was considered as strictly a static resource for naval warfare which remained at the location where it was placed and allowed the enemy to approach—in addition, a naval warfare resource which, as a ground mine was not employed deeper than 60 meters and, as a moored mine, rarely deeper than 250 meters—this situation has clearly changed. Mobile mines specially constructed for deployment from submarines and powered by a torpedo motor, are fired at a safe distance from their intended place of

deployment, sink unnoticed at the end of their running time, and become ordinary ground mines. Also, the reverse case—the mine which lies waiting and upon locating a target ship approaches as a torpedo—is already under development.

The Americans have surpassed the operational depth of 1,000 meters by the introduction of their Captor Mine (Captor: encapsulated torpedo), an MK-46 antisubmarine torpedo in a casting on an anchor-cable which, upon detection of a submarine, separates and independently searches out the target.

The region between 60 and 300 meters under water is covered by projects going by the designation "continental shelf mine." As far as is known, at least France, Italy, the United Kingdom and the United States are working on such a mine. It is still uncertain as to whether the solution will prove to be similar to Captor or will be equipped with an underwater rocket engine.

#### Where Do We Stand?

The German Navy's mine is in the process of completing a generational changeover. Acquisition of the G-l naval mine, which is planned for tactical offensive deployment by submarines, is being completed. It is being supplemented by the delivery of the mine belts in which the submarines can transport the G-l without having to reduce their torpedo load or being limited in speed or maneuverability.

The acquisition of mines which are to be dropped by the naval fighter-bomber Tornado is also making progress. The joint Danish-German development, the Anti-Invasion Naval Mine (SAI), was successfully concluded and procurement has begun. This mine is optimal for use in shallow waters off potential landing beaches and thereby closes a gap which until now has only been insufficiently filled.

The Sea Ground Mine (SGM-80), like the SAI a joint venture with our northern neighbor, is virtually ready to go into production. While it is being delivered it will replace forthwith the large number of U.S. ground mines which have made up the backbone of our naval stocks during the past 3 decades.

The entire new generation--G-1, SAI and SGM-80--is characterized by obvious improvements in nearly all important aspects:

- --Greater resistance to sweeping;
- --Greater ease of maintenance;
- --Higher ratio of explosive to total weight;
- -- Fewer futile detonations; and
- -- An ability to recognize and select targets.

The next step is the development of a wireless remote control system by means of which mines that have been laid can be armed or disarmed at will. With this, the freedom of maneuver of friendly naval forces, restricted by minefields, can at least partially be restored, and the risk which results from barrier gaps, reduced. Traditional mines have only modest chances of success against modern surface vehicles like the air-cushion and hydrofoil boats. Initial steps have been taken to again perfect the spectrum of countermeasures. Nearly all units of the fleet are capable of transporting mines, yet the main burden in the Baltic rests on 21 Schuetze-Class fast coastal minesweepers, 18 Ariadne and Frauenlob-Class inshore minesweepers, and utility landing craft. The fast coastal minesweepers have arrived at the end of their life spans and, beginning in 1989, will be replaced by fast mine warfare craft which take into account the requirements of the operational area, especially in the fields of transport capacity, passive self-defense, anti-aircraft defense, and navigational accuracy. An improvement in anti-aircraft defense capability is also planned for inshore minesweepers, which are being kept in service for a considerable time.

## Mine Deployment

The mine cannot be seen in isolation and it cannot be the panacea for all our worries, especially in the Baltic. As one naval warfare resource among others, it is an integral element in the conduct of naval warfare.

NATO's concept of maritime operations, in whose formulation the German Navy extensively participated, has three fundamental principles:

- --Checking the enemy;
- --Forward defense or defense in depth, as the case may be; and
- --Maintaining (or winning back) the initiative.

The mine can make a considerable contribution to upholding these principles: Mines which have been tactically deployed for offense of fighter-bombers and submarines check an enemy and begin the defense within our echeloned in-depth system of various naval warfare resources as far forward as possible.

In this case it is not a matter of a great, locally concentrated threat, but is a matter of widely dispersed minefields of relatively low density which are intended to create uncertainty and lead to the dispersal, engagement, and attrition of the enemy's forces.

The blocking of passages and straits with heavy ground mines and the protection of landing beaches by anti-invasion mines delay an attacker and force him to conduct large-scale sweeping operations if he does not wish to assume a great risk. His tempo of operations is thereby reduced and the initiative, which will always be on the side of the attacker, is lost.

Whenever the enemy is delayed, forced to institute mine countermeasures, and possibly even concentrates his naval forces in cleared channels, there is an

opportunity to use other naval warfare resources such as submarines, fighterbombers and strong, light surface forces.

Although in World War II, with over 700,000 mines laid, nearly 7,000 vessels were sunk--not to mention those damaged--casualty lists do not tell the whole story. The mine fulfills its task just as well when merely the fear of its effect forces an enemy to shift operations, reroute ships or--even in peace-time--establish strong mine countermeasures units. From 1942 on German submarines laid 334 mines off the American east coast and thus forced the United States to maintain more than 100 minesweepers and their crews until war's end.

### Summary

Control of the Baltic Sea and seizure of the Baltic Sea approaches have high priority for the Soviet Navy if it wishes to effectively deploy its Northern and Baltic Fleets for air and naval warfare in the Atlantic and support its ground forces on the flanks. To achieve this goal, it will have to attempt to take control, in amphibious operations, of the islands and land areas surrounding the outlets.

The new generation of mines, together with their partially new, partially modernized transport vessels, will continue to be, in close concert with the other naval warfare resources, a potent instrument at the disposal of the fleet commander.

The German Navy's Mine Countermeasures Mission

Mine countermeasures are concerned with an opponent about whose value as a weapon opinions diverge. To one person the mine may appear as too passive, to another as a cowardly and treacherous means of concealed underwater combat. On the other hand, the inventor of the mine, the American Robert Fulton, had a thoroughly honorable goal in mind: The mine was supposed to ensure freedom of the seas by making naval vessels pointless.

Independent of such attempts at value judgment, one thing remains incontrovertible: Mine countermeasures must deal with an opponent which, with the aid of the most modern technology and an unlimited inventiveness, presents it with the most difficult tasks. The competition between mine technology and mine countermeasure technology has not occurred in the workshops of lone dabblers for a long time, but in well-appointed laboratories, computer centers and test sites. And the mine is generally a step ahead. Mine countermeasures are in the position of reacting to the mine builders' inexhaustible flow of ideas—it does not have the initiative of action.

Navies in the lead in mine technology generally lead also in mine countermeasures. The German Navy uncontestedly belongs to this circle. It is far ahead not only quantitatively, but also qualitatively. It disposes over the second largest mine countermeasures fleet in the world and operates systems which are €echnologically state-of-the-art.

#### Offensive Mine Countermeasures

It is obvious that mine countermeasures do not begin only after the enemy mine has been laid.

It is the first objective, in the context of offensive mine countermeasures, to destroy the mine carrier before it lays mines. This is the most effective manner of counteracting mines. In view of all the larger navies' 3-dimensional minelaying capability, there are limits to this. Aircraft, in particular, with their great penetrating ability, but also submarines which are hard to detect, can overcome or undercut offensive mine countermeasures. The German Navy is opposed by an enemy with a multitude of mines and mine transport resources. Moreover, it is confronted in its operational area by the most diverse hydrographic conditions which require a multifaceted response. Only a spectrum of mutually complementary mine countermeasures can assure it success.

This spectrum includes not only mine countermeasures vessels of the most diverse technologies, but measures such as mine spotting, ship traffic routes or passive ship defense also are part of it.

Mechanical and remote-controlled sweeping played the dominant role in active mine countermeasures up until about 20 years ago. This kind of traditional minesweeping is carried out in the German Navy by the fast coastal mine-sweepers and inshore minesweepers stationed in the Baltic Sea area. With towed devices they simulate conditions required by a ground mine for detonation and thus cause them to explode.

In this, sound buoys (which create a sound spectrum similar to ships) and cables or solenoids (through which strong currents flow and about which magnetic fields form) play a decisive role.

Against moored mines, minesweepers—also towed—employ steel cables, armed with claws, which are spread out by the water streaming past them. When they encounter an anchor—cable, they literally saw through it and the mine container ascends to the surface of the water where it is rendered harmless.

Even though these minesweepers, whose primary role is the laying of mines, are quite old, they are still today proving their ability to counter mines.

To be sure, they have some serious disadvantages: The minesweeper must first pass over the mine before the towed device can render it harmless. Of course, not every mine has been designed from the start for use against the minesweeper; nonetheless, the danger to ship and crew is great.

An additional disadvantage: Simulation-sweeping is a lengthy and involved method of operation in which sequenced steps must be worked through, activation delays must be waited out, or very specific detonation conditions must be simulated until the invisible enemy gives up. And even when a minehunter has finally neutralized a mine, it still does not know whether mines with pressure components remain behind and wait for their target ship.

Developments in weapons technology proceed dynamically. One side attempts to make up for the advantages of the other. In this case the challenge was the mine's distinct advantage over its adversary: It could elude him, force him into wasting time, and, if need be, force him to engage it first. Mine countermeasure operations' response was "minehunting" and "Troika."

## Locate-Identify-Destroy

However cleverly devised and sophisticated the detonation system in a mine may be, it cannot protect it from elimination by the minehunter. The latter detects it with its high-frequency sonar before passing over it.

The next step is identification and destruction by an explosive charge which is taken to the mine by means of an underwater drone or by divers. The similarity with submarine hunting is unmistakable. It results not only from the locating-identifying-destroying steps, but also from the struggle of the hunter against the often difficult conditions to which the sonar beam is subjected on its way from the oscillator to the object and back.

An additional problem unknown to submarine hunting can make life difficult for the minehunter: the nature of the ocean floor.

If mines are sunk into sand or silt, hidden in boulder fields or even disguised by shaping and/or surface texturing, it is possible that they cannot be located.

With this multiplicity of problems it becomes evident that minehunters cannot be employed everywhere. About 170 percent of our operational area is suitable for minehunting. The requirement for minehunters, which is not completely fulfilled by the 12 331-Class craft, is correspondingly large.

One possibility of effectively utilizing the insufficient minehunting capacity consists of continuously combing the sea-lanes and harbor approaches. All mine-like contacts established in the process are recorded on special maps or in other data bases. Then, during subsequent missions, only objects which have recently appeared need to be investigated.

The "Troika" Complementary System Points the Way to the Future

Our Navy's minehunting craft are extremely efficient. Nonetheless, there are areas in which improvements can increase their performance and scope of operations. It will be a matter of reducing negative environmental influences on the sonar beam. This could be accomplished, for example, by getting the sonar device closer to the mine.

Measures to increase hunting performance could be an additional approach. In this connection automatic documentation and the simultaneous use of several underwater drones are conceivable. Surely there is sufficient leeway to alter sonar's parameters in such a way that areas which today are unsuitable for minehunting, will be able to be hunted in the future.

Despite all efforts in this direction, mine countermeasures cannot succeed in our operational area with minehunters alone. The Navy has therefore introduced the "Troika" or 351-Class solenoid sweeping guidance craft.

It consists of a guidance vessel which can simultaneously remotely control three minesweepers, called "Seals," equipped with magnetic coils and noise generators. Unmanned, they go after ground mines. To remove moored mines, the guidance vessel employs its high-resolution mine-avoidance sonar out front and cuts the mine loose with a conventional, towed device.

Experience with "Troika" has demonstrated a threefold advantage:

- 1. Ship simulation has been more successful than with conventional sweeping devices.
- 2. The simultaneous deployment of several "Seals" by a single guidance vessel is associated with a considerable increase in efficiency.
- 3. The risk to crews and boats has been reduced because the guidance vessel can remain outside the area to be cleared.

In the case of "Troika" as well, performance can be increased to a certain extent by simple measures. Foremost in this regard is improvement of the navigational equipment. The system has, in the guidance radar equipment for the "Seals," a relative navigation system whose accuracy is clearly superior to that of traditional radar devices.

As a complement, an increase in the absolute navigational accuracy, such as is offered by satellite systems or modern electronic navigation links, is necessary. For navigational accuracy and performance are directly linked to each other in minesweeping. Equipment and technology are not everything in mine countermeasures. The mine clearance diver, who in the performance of his mission ventures into the flowing waters' cold, dark depths, is a conspicuous example of this. Antimine defense is, and regards itself, as a part of the whole. It is not an end in itself, but a service to the fleet.

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COMMENTS ON CONTINUED NATO MEMBERSHIP, U.S. BASES RETENTION

Negotiations on Realistic Bases

Athens ELEVTHEROTYPIA in Greek 27 Jan 87 p 9

[Article by Victor Netas]

[Excerpts] The debate in the Chamber of Deputies on national defense was indeed frank and realistic. It could not be otherwise since the issue is very serious and cannot be subjected to sloganeering and political exploitation which might disorient the people and create false impressions.

The Greek people are entitled and must know all about the bases and our relations with NATO. They are also entitled to know how the major parties stand on these issues and the justification for such positions.

We believe last week's debate cleared up many questions and dispelled the illusions of those who could not objectively and realistically assess the present reality—a reality which no government excercising its authority responsibly could ignore. And national defense is the first responsibility of a government. Its policy, therefore, cannot put national security in danger but must safeguard it with correct handling.

As was expected, the debate in the Chamber focused on the American bases and NATO. On NATO the premier's position was clear: "We are staying in NATO and this is a conscious decision of our country. We will not quit NATO now because reasons of national security compel us to stay..."

Therefore, NATO is a necessary evil which our country cannot shake off. Of course, no one can forget what happened [to our relations] with NATO when Attila invaded Cyprus nor can one forget NATO's overall position on the Greek-Turkish dispute. What is now sought is to formulate a position between Greece and NATO which will ensure Greek interests within the limits of the possible.

Important steps have been made in this direction and more must be made while battles are continuously and determinedly being fought within the Alliance and continue as long as there are Turkish threats and expansionist claims at our country's expense. After our past adverse experiences, no one would

become NATO's defender and would consider any relation with it reservedly and suspiciously.

Nor is our staying in NATO a guarantee that a clash with Turkey is not possible. For this reason our country must depend mainly on its defense and its forces while continuing at the same time its political handling.

As concerns the issue of the American bases, which is equally delicate and important, the premier answered with a question: "Are there rewards, one wonders, the Greek people would accept in exchange for the presence of American military forces? Let each one of you think about it. I am not about to give an answer to this question. I am only telling you this: I have made no commitment whatever and negotiations for the bases will start from point zero..."

No one likes the presence of foreign bases in Greece. Yet their presence is a reality which cannot be easily contravened because of the Greek-Turkish dispute and since it is possible to predict what will happen if Greece decided to remove the American bases. Turkey's ability to negotiate would automatically be strengthened and our country would be exposed to greater danger if it did not have guarantees from elsewhere.

Therefore, the bases' issue raises questions about guarantees, rewards and better treaty provisions. Let us be open and frank: The bases must also serve Greek interests. The United States must guarantee Greece's independence and territorial integrity. The Americans must provide more rewards and must stop their indirect blackmail which is known even to the most naive of the Greeks. They do not do us any favors by having their bases on Greek soil. Nor is the "assistance" (a misnomer) they give a favor.

The premier has said that the government holds some trump cards. Of course it must play these cards and of course there must be a broader popular consent on the bases and NATO.

Negotiations for the bases will be long and arduous. Many cards will be played openly and secretly. It is not easy to conduct negotiations with a super power which knows which of its actions caused and perpetuated anti-Americanism. How and by what means Greece will succeed in keeping the bases in Greece are of no importance. Only the preconditions and dispositions with which the Greek people will maintain the bases are of importance.

In recent years we have seen regimes the U.S. supported with arms fall as a result of the people's wrath which was underestimated. We believe that Greek-American relations have changed somewhat as a result of the policy the present government followed, a policy which was dictated by the people's attitude.

# Ground Seen Prepared

Athens I KATHIMERINI in Greek 30 Jan 87 p 4

[Article by G. Karagiorgas: "Wanted: A Puppet"]

[Excerpt] the PASOK Manifesto's particular chapter on the American bases states that if the issue of the bases is indeed linked with vital security matters then it ceases to be a one-party issue and assumes broader national importance and concern for all parties and all fronts. The Manifesto consists of 70 typewritten pages and was handed to the premier 6 days ago by Sotiris Kostopoulos, the chairman of the committee studying the bases' question.

It is not known when and how copies of the Manifesto will be distributed among the party members or when its contents will be announced to the people. Its distribution to the members will mark the second phase of the effort to psychologically prepare PASOK's members to fully understand the decision about the bases staying in Greece and to update the people in the event they are asked to decide by referendum whether the bases should stay or not—just as the Spanish people did.

The first phase and the first shock for the party hardliners was initiated last week in the Chamber of Deputies during the open debate on national defense when Papandreou repeated his position in favor of NATO and officially committed himself that negotiations would start about the bases staying in Greece.

Certain recent coincidences are worth noting. A Soviet official visited Nicosia. Boutos went to Turkey. Ozal was invited to Washington. Papandreou announced that new negotiations with the Americans will start from point zero. Mitsotakis warns Papandreou in the Chamber to be careful about the rewards he will receive from the Americans for signing the bases' agreement—they should not be of partisan but of national benefit.

The two groups which threaten to split PASOK function under two leaders of different tendencies (one is Gerasimos Arsenis, the second is reported to be Gennimatas) and display signs of disobedience and indignation. Cadres who were ousted from the government do not hide their disappointment and air their concern about the economic deadlock and the Movement's downslide in the administration sector.

Ministers speak to their friends about most of PASOK's actions with sarcasm and contempt. Why are you ungrateful? Why don't you quit, why don't you publicly denounce all that you bear witness against? [They are told]. They answer that they want to save the Movement from its leader and for this reason they undergo sacrifices, they say, and that is the reason they stay in the Movement, they add; and they look at you suspiciously, trying to find out if you really believed what they said.

Papandreou knows all these things, not in detail perhaps, but without doubt along general lines. For this reason he did not want to sign the final agreement for the bases himself. Ratification, whether by referendum or not, will be signed by another government of unity or emergency.

The Papandreou followers and the rest of the people will know that the decision not to remove the bases—as the Manifesto states—is not a party's choice but a national necessity. And there are perhaps ambitious persons who would like to assume the premiership during a critical period and for an issue which will serve a national need.

This is the reward Mitsotakis evidently had in mind when, without uttering the slightest criticism, he asked Papandreou not to sacrifice the rewards in order to gain party benefits. This was a very clever and well-planned more on the part of PASOK's leader who will now face the coming elections free from criticism concerning oscillations on the question of the bases and free from the nightmare of the Cyprus and the Turkish issues.

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MILITARY

DETAILED REVIEW OF ARMS INDUSTRY, SALES ABROAD

Lisbon EXPRESSO in Portuguese 24 Jan 87 pp 17R-19R

[Article by Jose Judice and Benjamim Formigo]

[Excerpt] Obsolete Industry

Between 1974 and 1980, when the Gulf War began, Portuguese arms plants led a quiet and uneventful life on the banks of the Tagus River, where they manufactured munitions basically for the Latin American dictatorships, their old and loyal customers. The Argentine military dictatorship, the former Uruguayan regime, Bolivia, and Generals Pinochet of Chile and Stroessner of Paraguay were or are regular purchasers of sizable quantities of Portuguese war materiel. They have absorbed most of the 889,000 contos worth of ordnance sold to South America by Portugal during this decade. Following a brief interruption in 1974 following the events of 25 April, during which some exports to Chile were suspended, trade returned to normal "in order to guarantee 4,000 jobs in the industry," according to the argument regularly used by all the sources we contacted.

The Portuguese arms industry had been overdimensioned from the start in order to fill large West German and U.S. orders for munitions under the terms of an agreement signed in the 1950's as part of NATO and making it possible to establish an industrial base, train personnel, and purchase the necessary equipment. Between 1961 and 1966, Portugal sold more than 50 percent of its production abroad, chiefly to the FRG. Beginning in 1966 and continuing until the end of the colonial war, Portuguese exports represented from 30 to 40 percent of everything produced by the National Light Weapons Ammunition Factory (FNMAL) in Moscavide and the Military Factory in Braco de Prata, which is now run by INDEP (National Defense Industries). At the end of the 1960's, West German imports ended, but the war in Africa provided an economic base enabling the industry to continue functioning with no major problems.

With decolonization, the Portuguese defense industry experienced a structural crisis. According to specialists in the field, including NATO experts, Portuguese industrialists, and senior officers, a thorough restructuring is essential to enable the industry to realize its full potential. At present, Portugal sells practically nothing to Europe or to its NATO allies because the

military technology it can supply is obsolete. Until 1983, when large orders for the Gulf War led to the introduction of new products, Portugal had manufactured G-3 rifles, HK-21 machineguns, and 60mm and 81mm mortars, along with ammunition in calibers of 9mm and 7.62mm (for light weapons), ammunition for 60mm, 81mm, and 120mm mortars and 105mm artillery shells, aircraft bombs, and a few types of fuzes, as well as explosives such as TNT.

All those kinds of materiel, none of which requires great technological sophistication, also began to be manufactured at competitive prices in South Korea, Taiwan, and Singapore. The result was that while most prices in the world were rising, the price of a 105mm artillery shell dropped from \$160 to \$120 in the space of 5 years.

## Confidential Authorization

In January 1985, a confidential order from Figueiredo Lopes, then secretary of state for defense, authorized the supplying of 155mm artillery ammunition to Iran. Previously, on 19 December 1983, the national director of armament had refused to allow 350,000 155mm artillery shells to be imported to Lisbon for reexport to Iran. The authorization by Figueiredo Lopes took "the domestic industry's significant direct participation" and "the economic impact of the order" into account, and it was granted on condition that "domestic content be not less than 50 percent" and that the necessary technology be transferred from the foreign manufacturers to the Portuguese plants. As a result, the Portuguese firms began importing the metal components—chiefly from Spain—and then assembling and arming them in Portugal.

But the required percentage of "domestic content" does not seem to have been scrupulously respected. A former INDEP manager says that in the case of 155mm ammunition and also 203mm shells, which were also armed in Portugal, domestic content boiled down to fuzes, part of the propellent, and labor (arming and painting). The same is true of mines, according to what EXPRESSO was told by a former CEMGFA [Armed Forces chief of staff], who gave as an example the importation of Italian mines to which detonators were added and which were then reexported as Portuguese war material.

## Complicated Deals in Persian Gulf

Understandably, arms deals are shrouded in the greatest secrecy by most of those involved: manufacturers, dealers, and customers. Not only does the arms trade—even the legal trade—carry the stigma of being a dirty business, but frequently it really is a dirty business.

In 1980, before the Gulf conflict began, Portugal exported 2 million contos worth of war materiel. The following year, Iraq alone imported more than half that much from Portugal. Baghdad was again the Portuguese defense industry's best customer in 1982, when its purchases totaled 3.5 million contos, or 73 percent of Portugal's total exports of war materiel, and it almost doubled that amount in 1983 with purchases totaling 6 million contos. That marked the peak in our sales to Iraq.

The following year, Iran--which before then had scarcely bought so much as a screw from the Portuguese defense industry--became our second-largest customer at 1.5 million contos, just behind Syria--which before 1984 had never bought one bullet from INDEP.

As soon as the United States decreed the arms embargo against Iran—a move supported by most of its Western allies, including Portugal—Tehran began working through intermediaries to try to obtain the arms that no one would sell it directly. The Damascus regime, which is Baghdad's traditional enemy, saw support for the ayatollahs as a way to undermine the power of the Iraqi president and his Ba'th Party. It is thought that Syria therefore became one of the main channels for supplying the Iranian Armed Forces during that initial period of the embargo and until Tehran was able to convert its mostly American equipment. According to the Iraqi minister of foreign affairs, Tariq 'Aziz, Syria acted as middleman in the purchase of NATO 155mm artillery ammunition from Spain for Iran.

Similar suspicions arose in Portugal when Syria, which in previous years had bought neither weapons nor ammunition in Lisbon, presented a sizable order worth several million contos. In 1984, the first deliveries amounted to 2.6 million contos. As a result of those suspicions, a "political decision" was made "not to sell any more weapons to Syria." That decision had no effect, however, on the commitments already made, with the result that in 1985 and 1986, exports to Damascus continued to the tune of over 4 million contos.

Meanwhile, Iran was attempting to obtain supplies on the Portuguese market, which was one of the few markets in a position to manufacture at attractive prices the unsophisticated materiel needed to supply its infantry and artillery. During the embargo years, Iranian government agents pressured Lisbon authorities to change their policy. One of the middlemen between Tehran and Lisbon-North Importing Company, a traditional arms importing and exporting firm-was in contact with members of the AD [Democratic Alliance] government, particularly Marcelo Rebelo de Sousa, concerning ambitious projects which the Iranians wanted to carry out in Portugal.

In that connection, Portugal was visited in May 1985 by an Iranian military mission made up of representatives of the Ministry of Defense and the three branches of the Iranian Armed Forces. In the greatest secrecy, they spent 48 days visiting every Portuguese industrial and military sector likely to be of use to Iran.

Studied in particular was the suitability of using the facilities of SETENAVE [Setubal Shipyard] and the General Aeronautical Equipment Shops to maintain Iran's entire naval and air fleets. According to well-informed sources, those plans, which have been dragging on for years, are now under consideration by Cavaco Silva's government.

## Dirty Tricks

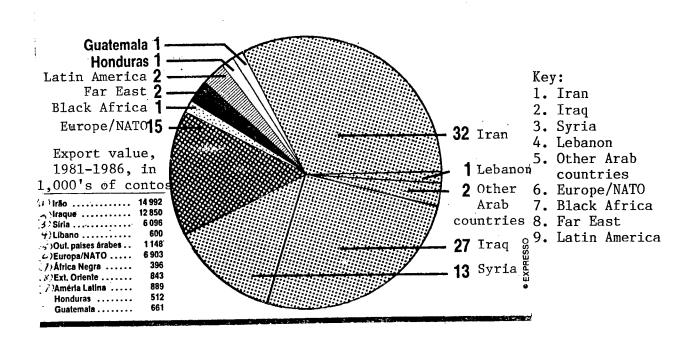
After the Soares government decided to open the doors to Iran, the market of the ayatollahs looked like an excellent source of revenue to the arms sellers.

The intense competition led to tricks of all kinds. One of the most famous in the world of the arms trade occurred when a shipment of Portuguese arms that included G-3's and mortar and artillery shells showed up in London and was offered at prices below those on the domestic market.

Shortly after sales were authorized, a traditional Portuguese arms dealer ordered a large shipment of arms and ammunition from Portuguese factories. Seeing that order as a means of also entering the international market, some of the managers of those firms decided to approach Iran, through a middleman in London, with an offer to supply the same arms at prices considerably below those usually in effect, thus short-circuiting the Portuguese dealer who had issued the original order. According to a source in the business, that situation wound up causing "somewhat serious" problems within the Iranian Government itself, since its purchases from Portugal until then had been at a higher cost than that now being offered through a middleman in London.

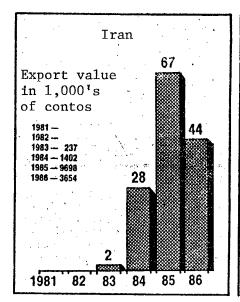
Two dealers, one French and the other Lebanese, were able to buy 2,000 G-3 rifles and 1 million rounds of 9mm ammunition from INDEP on 13 October 1983 by saying that the purchase was intended for Iran. That shipment, along with West German MP-5-A-3 submachineguns (for special operations), was sold by the two dealers. The submachineguns later turned up in the hands of Lebanese terrorists.

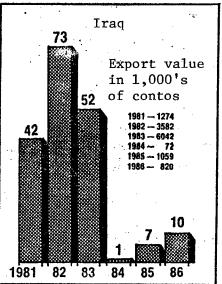
Destination of Portuguese Arms and Ammunition, 1981-1986 (percentage relative to the value of total exports in those years)

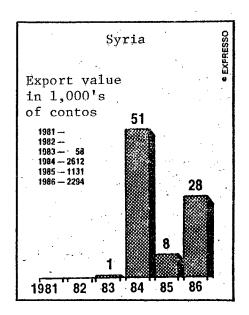


Source: National Statistics Institute

Exports of Arms and Ammunition for the Gulf War, 1981-1986 (percentage relative to the total value of exports of Portuguese arms for the years shown)







Source: National Statistics Institute

A source in the Ministry of Defense told EXPRESSO that for some time now, "there has been a concern not to allow the exportation to certain countries of material that might be used in terrorist activities."

That recent concern did not come in time to prevent Portugal from exporting 400 tons of arms and ammunition to Lebanon, the refuge of every terrorist organization in the Middle East, between 1983 and 1986.

As a customer, Iran has mobilized the efforts and imagination of many entrepreneurs employed by state-owned arms firms. Alpoim Calvao, former chairman of EXTRA (Trafaria Explosives Company), in which the state is the majority stockholder, has formed a partnership with one of his management colleagues to buy the rights to a firm known as the Barcarena Powder Factory, an old defunct company whose facilities were bought by an electronics firm after it lost its license to manufacture explosives. Using the firm's name and bylaws, which permit it to market war materiel, Alpoim Calvao is now-according to our sources—going to call a general stockholders meeting to reactivate the firm. A source at the EMGFA [General Staff of the Armed Forces] told us: "Since they no longer have a license to manufacture explosives, the only thing they can conceivably do is market war materiel."

# Tight Spot

Despite the Iranian gold mine, INDEP is in a tight spot. Sales of 3.9 million contos in 1984 did not prevent a loss of 63,000 contos, even though it had posted a net profit of 69,000 contos in 1983 on a trading volume of 4.6 million contos. In 1985, however, the situation reversed itself, and INDEP showed a net profit of 2.8 million contos on sales of just over 6.5 million contos.

For its part, the Portuguese Explosives Company has been experiencing a steady drop in net profits since 1983. Its profits fell from 1.042 million contos in 1983 to 692 million contos in 1984 and 122 million contos in 1985.

EXTRA is in a difficult situation despite a sudden leap in sales between 1982 and 1983. In fact, after billing 500,000 contos in 1982, it saw its sales jump to 7.5 million contos the following year and then fall to 4.7 million contos in 1984. As a result, it passed from a loss of 34,000 contos in 1982 to a profit of 440,000 contos the following year and a profit of 90,000 contos in 1984. Because of alleged irregularities now being investigated by the current management, EXTRA is not in a good position.

Despite the poor results shown by the state-owned arms firms, arms sales to the Middle East, which accounted for 75 percent of Portuguese arms exports between 1981 and 1986, have brought in more than 35.7 million contos. Without the Gulf War and the sales to Iran, what would have happened to the Portuguese industry? Its obsolescence limits its markets to the Third World. But even so, the market penetrating ability of Portuguese sellers of fairly antiquated rifles and bullets has not been very great. In Africa, for example, Portugal sells almost nothing. Between 1981 and 1986, Portugal's sales to its former colonies totaled a little over 100,000 contos.

Admiral Souto Cruz, adviser to the Arms Industrialists Group of the AIP [Portuguese Industrial Association], says that if the industry does not convert, "what we manufacture will no longer serve for our Armed Forces." As examples, he cites the Air Force and Navy, where all the ammunition used is imported.

In more practical terms, what this means is that Portuguese factories should abandon the production of obsolete materiel such as 105mm artillery and acquire the technology for manufacturing more modern materiel (and not just assembling it with imported components). Examples would be the 155mm and 203mm shells used by NATO. Our exports to countries in the Atlantic Alliance have been declining steadily in recent years.

But there are those who express skepticism as to the feasibility of a meaningful conversion. One general told EXPRESSO that although he feels that "conversion is necessary, since it would not only open up new markets but also allow the arms industry to be used as an instrument of foreign policy," he doubts its feasibility. The same source said that as long as Portuguese factories continue to export 95 percent of their production to undemanding customers in the Third World or through unscrupulous middlemen, "the shady deals are going to continue."

11798 CSO: 3542/48 MILITARY PORTUGAL

#### **BRIEFS**

PORTO SANTO AIRPORT EXPANSION -- The NATO Executive Commission on Infrastructures, the EMGFA and representatives of the Tamega enterprise are to participate today in the ceremony to launch the first stage of expansion at the Porto Santo Airport, with an investment budgeted at 2 million contos. This first phase of the NATO infrastructure development in Porto Santo calls for equipping the existing airport for use by the A-7P aircraft of the Portuguese Air Force. To this end the runway, which is currently 2,400 meters long, will be lengthened to 3,000 meters. Work on the development of 18 distribution points (parking places) for the aforementioned A-7Ps will also be In the second phase, plans call for the building of premises suitable for the installation of a base to accommodate a national squadron of A-7P A project designed to expand the airport with a view to more extensive commercial operations than exist at present, within the norms imposed by the international civil aviation organization, will be pursued simultaneously, along with the completion of these infrastructure projects. The awarding of the bid for the project to the Tamega firm took place last December. [Text] [Lisbon DIARIO DE NOTICIAS in Portuguese 21 Jan 87 p 5] 5157

CSO:3542/45

MILITARY SPAIN

EXTENT OF DRUG CONSUMPTION IN ARMED FORCES EXAMINED

Army Blames Permissiveness

Madrid YA in Spanish 15 Jan 87 p 7

[Article by Fernando Rueda]

[Text] A report drafted by armed forces experts says that one of the serious problems created by drugs in the military barracks results from the contradiction which exists between the permissiveness with regard to drug consumption in civilian life and the total prohibition on it which prevails in the regiments.

Reliable sources have told YA that the report, which was recently completed and submitted to top authorities in the defense sector and the three military branches, provides a detailed analysis of all aspects of the subject of drug consumption in the military, withthe latest statistics on the problem. One of its conclusions is that the number of cases reported declined in 1986 as compared to earlier years, when the totals reached ran as high as the 1,600 cases reported in 1984.

The authors of the report maintain the same thesis they defended in earlier years, asserting that the majority of the drug addicts had already consumed various types of narcotics before entering the military ranks, and only a very small number begin drug consumption during their year of military service.

This report, classified "confidential" by the military authorities, was drafted by the members of the Commission on the Prevention and Control of Drugs in the Army (PYCODE), who are land army personnel. This group was established 2 years ago on the initiative of the then chief of the general staff, Jose Saenz de Tejada, who revealed sensitivity to a problem which had for the first year decreased, at least in numerical terms.

During Saenz de Tejada's term of service, several captains general, including in particular Manuel Vallespin and Prudencia Pedrosa, undertook measures designed to provide support for drug-addicted soldiers. Suicides which were never reported by the media and accidents due to "unknown causes" led the military commanders and the authorities at the Ministry of Defense to seek solutions to this problem, which exists in all the armies of the world.

Currently the Ministry of Defense is pursuing programs to prevent soldiers from consuming drugs and to prevent those who became addicted in civilian life from creating problems in the barracks.

The first and most important measure for combating drugs in the military was the approval of new legislation pertaining to drug addicts, which attacks the problem beginning the very moment young people present themselves for military service. With the reform, which has already been applied to the last contingent called up for armed forces service this month, all the young men who have been shown by clinical and analytical evidence to have consumed psychotropic substances for other than therapeutic purposes have been temporarily rejected.

This reform made it necessary for the FAS physicians to request more equipment to identify this type of patient. As a result, a Ministry of Defense announcement was published in the BOLETIN OFICIAL DEL ESTADO last Tuesday concerning the purchase of a liquid chromatography apparatus, an apparatus for detecting drugs in urine and a flame spectrophotometer.

Along with the legal measures, which have partially resolved the problem, the General Office for Social and Media Relations at the Ministry of Defense has created a recreational section to provide the barracks with the widest possible range of cultural activities.

#### Statistics Provided

Madrid YA in Spanish 16 Jan 87 p 10

[Article by Fernando Rueda]

[Text] A half of the young men beginning their military service have consumed drugs once and 27 percent consumed drugs during their year in uniform, the most recent report on drugs in the army, to the text of which YA had access, reveals.

The report, which was completed a few weeks ago, contains the figures for the year 1985, during which 2,484 soldiers were the recipients of sentences ranging from 15 to 60 days in jail. Of these sentences, only 121 were imposed upon soldiers who had consumed drugs while on duty, while six had done so while traveling in vehicles and 25 did so under other circumstances. The figures included five soldiers who committed suicide, presumably due to drugs.

Those responsible for the PYCODE plan point to the contrast between the tremendous difficulties encountered in consuming drugs in the barracks and the permissiveness existing in civilian life, as YA reported yesterday. "There is a lack of clarity in the application of measures," the report said, "and the same type of crime is penalized differently under civilian and military law." The report urged the competent authorities to clarify the terms "habitual" and "possession" in connection with drug consumption. They are included in the Disciplinary System Law and the Military Penal Code, the various applications of which have resulted in different penalties for the same crime in the captaincies general.

The army's concern about the use of drugs in the barracks is substantial, despite the fact that the report said that the levels of consumption there are low and do not have any notable effect on daily life. In fact, not a single serious error occurred during 1985 because of drugs.

The document shows the need to increase the facilities for identifying drug addicts before they join the military ranks in order to avoid negative repercussions in the barracks. The figures are very significant. In 1985, 343 young men were temporarily rejected and 109 were permanently excluded, while 909 were rejected in the course of their military service.

## Soldiers Surveyed

Under the direction of the participants in the PYCODE plan, surveys have been made to increase the understanding of all the problems related to drug consumption. The surveys covered 3,060 young men, including professional soldiers and recruits, with a reliability level of 95 percent and a 2.5 percent margin of error. The soldiers surveyed were between 20 and 22 years of age, 90 percent were single and childless, and 60 percent were residents of cities. The background of 60 percent was lower-middle working class level, 70 percent were religious believers, and 60 percent had a weekly income during military service of less than 2,000 pesetas. The majority believe that drugs are harmful to their personal development.

Only one out of 10 said he had his first experience with drugs in the barracks, and the majority of the rest said that they smoked their first "weed" at the urging of friends between the ages of 14 and 17.

The drug most commonly consumed is marijuana, and the reason for its consumption in the barracks is the desire to avoid the present situation. The soldiers favor having talks on drug problems (the report recommends that the level of the lectures currently being given be improved) and they say that there are no special places for drug consumption in the military, although while walking and after lights out are noted as the most frequent times. Two out of every five soldiers say that they always carry the drug with them, that they consume it more frequently in groups than when alone, and that they "smoke" more on holidays and less while on maneuvers.

Curiously, drug consumers are termed "addicts" by a high proportion of those surveyed, who say that in the barracks, it is privates who are most often dealers, and that three out of every 10 consumers are corporals (those who will be discharged within a few months).

## Measures Adopted

The land army, which has stepped up the measures designed to fill the soldiers' free time since the emergence of the problem through the program called Soldiers' Educational Recreation, will expand the tests required for drivers by inckuding a drug-consumption analysis.

#### Drug Addicted Soldiers

Consumption	Recruits	Soldiers
Occasional	29.40	24.71
Habitual	9.81	8.92
Addictive	0.20	0.55
None	60.55	34.18

#### Concealment of Drugs

	Occasional	Habitual
Closet	11	7
Clothing worn	45	53
Bathrooms	1	O
Workshops	0.40	O
Other	43	40

#### Usual Time of Consumption

	Occasional	Habitua]
Morning	6	15
After meals	5	2
While walking	69	55
Free time	6	9
After lights out	14	19

The South Military Region and the Captaincy General of the Canary Islands have asked for suitable premises and specialized personnel trained to deal with withdrawal symptoms. The report, which merely set forth the request, indicated the desirability of granting the request.

The Fifth Military Region, which is greatly concerned about the problem, has prepared a video on drugs which has been distributed to the other regions, and pamphlets for preventive purposes have been supplied to all the soldiers.

Nine Recommendations for the Military Commands

The study concluded with nine recommendations to the military commands for dealing with drug problems in the military.

- 1. Provide complete information on the types of drugs and the dangers of consuming them.
- 2. Identify consumers and place them in suitable positions in the units.
- 3. Avoid either dramatizing or minimizing the importance of the problem.
- 4. Full implementation of the military training plan, without concessions to drug consumers, to ensure their physical improvement.

- 5. Constant educational work, bearing in mind that the commands must set an example for the troops.
- b. Try to avoid shouting.
- 7. Try to adapt consumers to their present environment.
- 8. Maintain contact with the families of drug addicts.
- 9. Success will lie in the implementation of these norms, mainly by the company captain.

Justice Ministry Denial

Madrid YA in Spanish 16 Jan 87 p 11

[Article by Julio M. Lazaro]

[Text] Yesterday the Ministry of Justice rejected the report which blames the problem of drugs in the military on "permissiveness" in civilian life, although the Ministries of Justice and Defense are participating in an interministerial group collaborating on the National Narcotics Plan, sources in Fernando Ledesma's department said. These sources attributed the denial to the fact that the defense report, on which YA carried an exclusive report yesterday, was marked "confidential," and as a result, Narcis Serra's advisors had not informed their counterparts on San Bernardo Street about it.

These sources indicated their disagreement with the conclusion that the drug problem in the barracks is the result of the contradiction existing between the permissiveness with regard to the consumption of narcotics in civilian life and the total prohibition on this activity in the regiments.

In this connection, they indicated that the partial and urgent reform of the 1983 Penal Code introduced a more serious penalty for drug trafficking in military units, which currently carries a harsher sentence than traffic in other goods. These sources emphasized that since the Penal Code was amended, the penalty for the introduction of drugs into the barracks can range up to 12 years in prison. "Therefore," they added, "there is no legal vacuum nor permissiveness with regard to drug trafficking, since the Penal Code provides penalties for these cases which may be rather harsh."

Apart from drug trafficking, and with regard to the specific problem of consumption, these sources noted that drug consumption in itself does not constitute a criminal offense. However, they said that the possession of classified substances, such as small quantities of drugs for one's own consumption, is against the regulations, and constitutes a violation of the health policy justifying confiscation of the substance possessed. "From this point of view," these sources said, "one cannot speak of permissiveness with regard to consumption either. In addition, along with the provisions of the Penal Code, the new disciplinary law for the armed forces treats the consumption of narcotics substances and alcoholic beverages in the barracks as a serious or very serious infraction."

With regard to the amendment of the legislation on drug trafficking announced by Minister Fernando Ledesma, this source said that the draft amendment of Article 344 of the Penal Code "calls for a substantial increase in the penalties to be imposed on drug traffickers" and indicated that its drafting is "rather well along."

"The amendment calls for an increase in penalties involving restriction of freedom and monetary fines, because we believe that drug trafficking is not only an offense against group health, but also conceals economic offenses by the so-called 'white-collar criminals,' since the profits obtained from drug trafficking lead to fabulous earnings in illicit funds," these sources added.

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5157 CSO: 3548/45 MILITARY SWEDEN

ULF ADELSOHN: PALME'S 'QUIET DIPLOMACY' FAILED TO HALT SUBS

Stockholm DAGENS NYHETER in Swedish 26 Jan 87 p 2

[Commentary by Ulf Adelsohn: "We Must Drive Away the Submarines. Quiet Diplomacy Failed To Halt Foreign Subs"]

[Text] Ulf Adelsohn will be writing columns on the editorial page during 1987. He is a graduate in Law and a Moderate member of parliament. During 1981-1986, he was chairman of the Moderate Coalition Party.

In the wake of the defense agreement between the government and the Liberal Party, it might be of interest to analyze how the Social Democrats have handled the submarine violations through the years.

Among other things, I wrote the following about Palme in my notes about the grounding of U 137 at Gasefjarden in the fall of 1981: "Between us there was a certain feeling of understanding and also an indefinable accord in our view of the submarine question."

During the almost five years since then, while we were party leaders at the same time, I did not once notice an equally decisive conduct on the part of Palme. There was never any question then of any "indefinable accord."

The violation at Gasefjarden occurred during Falldin's time, while the one at Harsfjarden coincided with Palme's return as prime minister. His foreign policy then became that of Sweden. The question is how Palme believed himself able to stop the violations.

Did the highest leadership in the Soviet Union know about the violations, their extent and how adversely they affected the relations between our countries? Olof Palme must have posed these questions. And he must have believed that if the leaders had a clear picture of the situation, the he as a person, his international standing, the Palme Commission with Arbatov and the expert Milstein, his vice chairmanship of the Socialist International, hsi often repeated and sharp criticism of the United States, his suggestions about a nuclear arms free corridor in Europe, which closely agreed with Soviet wishes, yes, all his international commitments would constitute reasons enough to prevail upon the Kremlin to see to it that the violations ceased.

The Kremlin would also have to be informed without a lot of fuss which might irritate the august gentlemen innecessarily. A statesman like Palme would be expected to employ more elegant methods.

The only problem was how to reach the Kremlin. Before Gorbachev, all the leaders were over the age of 75, they were all fairly hard of hearing and it was uncertain how the information actually got through to them. Getting through could take time and it might be even longer before the gentlemen reacted and before their reaction reached the part of the huge Soviet armed forces that was actually violating Swedish territory.

Viewed from this perspective, the social democratic policy is at least more comprehensible.

Olof Palme was not pleased when the independent Sven Andersson became chairman of the Submarine Commission. Mr. Andersson was probably not quite sure that the person of Olof Palme and his quiet diplomacy constituted the best policy.

And Olof Palme was disinclined to make a fuss or to raise the submarine question before the UN or other international agencies. On the contrary, he almost always tried to keep a low profile.

If we Moderates had not forced the pace, I believe that the government would have been even more cautious. Anyway, Palme and his associates seemed almost irritated by our initiative. As though we interfered with the opportunity to use Palme's special channels.

Since Harsfjarden, the defense has not managed to determine the nationality of the violators. The government never seemed to regret this, because then it did not have to make official protests to any country and could content itself with general statements. And I never heard that it was urgent that the military determine the nationality of the violators.

It was also a disappointment to try to throw suspicion on underhand contacts, like those of Ferm. Even when we Moderates knew for a fact that Ferm had such contacts, we were quiet. We never did get any explanation of or insight into the government's thinking.

Time went by, the violations continued and Palme never did reach the Kremlin summit. He tried in vain to pave the way for a trip to the Soviet Union by first getting an invitation from the United States, but Reagan refused to invite him. And in that tense situation, it was not easy to visit Moscow without first having visited the other superpower. When the trip to Moscow was finally arranged after the 1985 election, Palme was murdered and Ingvar Carlsson got to go instead.

It will be six years this fall since U 137 ran aground in the Blekinge archipelago. Palme was prime minister for three and a half years and soon he will have been dead for a year. As mentioned, Ingvar Carlsson has been to Moscow and has delivered Sweden's opinion directly to Garbachev. But the submarine violations continue. Even the Social Democrats must have realized that Palme's policy has failed.

What is Sweden to do now? Rearm our submarine defense so that we at least can hunt with a full force in two places at the same time. This was suggested by the Moderates, but it did not win a majority. There is no other way to strengthen our defense without giving up our neutrality and I don't think anyone is going to suggest that.

What then is the government to do? Will it continue with Palme's policy and quiet diplomacy while we slide into a grey zone where we gradually become used to the violations? Where we stop reacting and quietly accept a foreign power's aggravated violations of our country?

12339 CSO:3650/55 MILITARY

# FORMER MINISTER COMMENTS ON TURKEY AS REGIONAL POWER

Istanbul CUMHURIYET in Turkish 14 Nov 86 p 8

[Text] We began our question to Umit Haluk Bayulken, the Minister of Defense of the 12 September period by saying: "During your term of office as minister, steps were taken to integrate defense mechanisms between Turkey and the Persian Gulf countries and Pakistan which had regimes very similar to Turkey's." Bayulken corrected our phrase as "efforts to show concern and to establish ties based on mutual interest" and continued to listen:

"During the said period, the United States and its allies in the Gulf region were concerned that the military presence of an outside power in the region would invite opposing outside forces, such as the Soviets, to the Gulf. On the other hand, Turkey which is both a regional power and a member of NATO could convey the knowhow the United States wanted to inject into the region with fewer complications than the United States. This way, American military training could indirectly be injected into region, and it could be done without the direct involvement of the United States. When then U.S. Secretary of State Alexander Haig said 'we encouraged the strategic consensus in the region,' I got the impression that Washington encouraged and sanctioned this situation. During your tenure as minister did you hear remarks to the effect that 'as a regional power you can do much more in the Gulf than what we can'? Or did you get the same impression that we have?"

After implying that he is upset by these convoluted remarks, Bayulken said:

"Let me tell you this. It is not that easy to tell the Turkish Republic 'do this, do that' or 'be friends with so and so.' In fact, as far as I know Britain and the FRG have been subjected to and influenced by the wishes and political ideology of the United States to a greater degree than Turkey has. We have not been influenced as extensively as they have.

"As the government and as the executors of the general dispositions of the time we thought as follows: We had sufficient experience in our manufacturing industry and personnel, and we wanted to take better advantage of it. Then what could we do? When we purchase a weapon, the money spent is in a sense wasted because technology changes very rapidly. Moreover, many countries earn a lot of money from the sale of defense materials produced by state-owned,

private or mixed-ownership companies. For example, Brazil which has a foreign debt of \$80 to \$90 billion earns \$1 billion a year from the sale of arms. After examining all these facts it was decided: 'If we can manufacture a weapon on our own or through joint collaboration, then let us view the issue from that perspective.' Turkey's needs are evident. No military industry can live with restrictions on what it can buy. Then what must we do? We have to export. We had the following export prospects:

"1. We could go into joint manufacturing ventures in Western Europe. everyone has a percentage share, and we could get ours. We lost quite a few opportunities in the turbulent conditions and the unstable circumstances of the governments of the post-1974 period. We dwelled too long on 'can we or can we not.' Here, let me make a paranthetical remark. Now they are saying that if we enter the EEC, Turkey's industry would collapse. In other words. we still have no confidence in ourselves. We can enter the EEC; if it does not work out, there are numerous remedial actions we can take. actions do not work either then we can just withdraw. Entering the EEC is not enslavement. Beside political advantages, you are also gaining the opportunity to use new technologies. You are interfacing with those companies. They keep saying that it would be harmful. Would not those companies lose without entering the EEC? Today, even the social democrats in Turkey are not sure whether they should change the economic system in effect today. Where does this economic system work best? In the EEC.

"2. Now let us turn to regional defense cooperation. We thought that prospects of exports to the West are limited, but that there are nations, particularly the Islamic countries, with whom we could undertake joint ventures. Who are these countries? These are countries that our Western allies consider to be reliable—that is, they are politically stable countries. Of course, there were certain motivations in that; we were not unaware of that then, and nor are we now. Countries that appear to be stable today may become unstable in the future; we know who those are. On the other hand, it is not very rational not to take advantage of existing stability just because there may be instability in the future. We needed to take advantage of these countries. We decided to cooperate with countries that fit these standards.

"The Saudi Prime Minister and Defense Minister came here. We took them to Eskisehir. They were very impressed when they saw a wrecked airplane enter one end of the factory and emerge brand new from the other end. When they saw that I-class submarines are being built in Golcuk, the Saudi Prime Minister asked: "Sir, is everyone working inside Turkish?" When I said, "yes," he said: "How marvelous! Turkey has achieved tremendous progress."

"After various negotiations we began cooperating with Saudi Arabia and Kuwait in three areas: training, materiel sales and joint investments. On the issue of training, much had been done and was already under way in Tunisia. These were expanded, and I am sure will be expanded in the future.

"In the category of materiel sales, MKE [Machine and Chemical Industry Establishment] began selling munitions. We sent military missions to countries who were interested. Alternately, we admitted a special contingent of students in military schools here. We trained them as air and naval officers."

"In other words, did we send military officers to Saudi Arabia and Kuwait?"

"Yes. We did that with countries which requested it out of their volition, which were stable and which would cause no problems in terms of relations with Turkey."

9588

CSO: 3554/135

# BMFT ANNOUNCES SUBSIDY PROGRAM FOR PHOTOVOLTAIC PLANTS

Bonn TECHNOLOGIE NACHRICHTEN-MANAGEMENT INFORMATIONEN in German No 443, 17 Nov 86 pp 5-6

[Text of "Announcement on the Support of Photovoltaic Solar Energy Plants" issued by the FRG Minister for Research and Technology on 28 October 1986]

- [Text] 1. Between 1987 and 1991, in order to improve and demonstrate German performance in the field of solar energy, especially regarding solar cells and application/system technologies, the German minister of research and technology intends to support the installation and testing of photovoltaic solar energy plants connected to the grid and/or autonomous photovoltaic solar energy plants. Operators and/or manufacturers of such plants based in the FRG are eligible.
- 2. For the duration of the subsidy program (1987-1991), funds of approximately DM10 million per year have been designated. In each case financial support is subject to the availability of funds.

Subsidies for research and development expenses contribute, in principle, up to 50 percent for plants with an installed capacity of up to 10 KW peak. The research and development expenditures also include design and planning costs as well as costs of other technical and scientific work.

If the installed capacity exceeds 10 KW peak, a subsidy will be granted to cover up to 50 percent of costs provided that distinct innovative solar cell technologies or distinct innovative applications (in each case up to 10 KW peak) are tested. Additional costs exceeding this level in plants with a greater capacity using the same type of solar technology and of application can only be covered, in principle, up to 30 percent.

In addition to this subsidy, other public grants, allowances, and subsidy funds may be accepted as long as they do not exceed the public support allowance based on reasonable risk and innovative content.

3. The projects should contribute to the improvement of system and application technologies as well as to the documentation of maintenance and repair outlays and other costs. Plant components being used should meet top international standards (in efficiency, capacity, durability, etc.).

- 4. In order to ensure uniform recording and evaluation of data in the preparatory and operational stages of the individual projects, an accompanying measurement and documentation program to be performed by a third party is provided.
- 5. The criteria established for direct project subsidy by the German minister of research and technology apply. The subsidy decision will be made in a two-stage procedure consisting of screening and approval.
- 6. Interested parties who are planning the installation and operation of a plant during the above period should submit their plans in the form of a project outline for screening to:

Project Contractor for Biology, Ecology, and Energy at the Nuclear Research Center in Juelich GmbH, Attn: Dr Menzen, Postfach 1913, 5170 Juelich 1.

Applications should include the following details:

- -- Description of the plant, including technical data on subsystems and essential components;
- --Intended site, data on local solar radiation conditions and the available infrastructure;
- --Data on anticipated efficiency at the system, subsystem, and component level, estimated annual energy/current yield, and annual efficiency of the entire plant;
- -- Expected application plan, organizational structure, ownership conditions;
- --Planned system for collection of operational data;
- -- Estimated costs of the solar energy plant and anticipated operational costs;
- --Anticipated date of plant start-up.
- 7. Proposals will be accepted until 30 June 1989. Preliminary screening begins immediately. As of 1 December 1986 applicants who have submitted proposals which have been provisionally approved will be asked to submit sufficient documentation to prove that the conditions set by the German minister of research and technology have been met.
- 8. Subsequent screening will be carried out every 6 months beginning 1 July 1987.
- 9. The following criteria will be considered in the selection of suitable projects:

- -- The quality of the technical design;
- --Cost-effectiveness of the design;
- --Scientific and technical qualifications of the applicant or of the institute and work groups that have been proposed to carry out the project;
- -- Type of innovation.

In addition, the German minister of research and technology reserves the right to:

- --Call in independent experts to assess proposals received;
- -- To work toward regional distribution of the projects in order to improve their demonstration value.
- 10. For further information contact:

Project Contractor for Biology, Ecology, and Energy at the Nuclear Research Center in Juelich, GmbH, P.O. Box 1913, 5170 Juelich 1

Tel: 0 24 61/61 -48 80 (Dr Menzen)

-52 11 (Dr Batsch)

-47 44 (Office).

Bonn, 28 October 1986.

[Signed] The German minister of research and technology

By order of Dr Bauer.

8701/12851

CSO: 3528/M098

ENERGY

CONSERVATIVE PARTY URGES INCREASED DRILLING IN NORTH

Oslo AFTENPOSTEN in Norwegian 24 Jan 87 p 8

[Article by Morten Malmo: "More Oil Exploration, Oien!"]

[Text] The Conservative Party is now directing sharp criticism at Oil and Energy Minister Arne Oien: "The cabinet minister must cut red tape and take steps to speed up oil exploration off the coast of North Norway," said Conservative industrial policy spokesman Per-Kristian Foss. He called for year-round drilling in the north starting this summer and the announcement of the 12th round of concessions by June of this year.

The background for urging more action on the part of the oil minister is this: At this time there is no exploration activity going on off the coast of North Norway. Drilling might get going on Tromsoflaket late in the spring. The lack of activity has led Norsk Hydro to consider rebuilding its special rig for Arctic waters for use in the North Sea. Several Statoil and Hydro employees stationed in Harstad are commuting to work in the south. In addition officials in the Oil and Energy Ministry stated in a letter to the North Norway Oil Council and others that future plans will not emphasize shifting activities to the north as much as previously anticipated.

#### Pessimism

"It is a long time since things have looked this black in the north. I am afraid that what has happened, including the letter from the Oil and Energy Ministry, will strengthen the pessimism of businesses on shore. For example there have been investments of several hundred million kroner in oil bases and these big investments are largely unutilized now," Foss said.

#### More Steps

The Conservative industrial policy spokesman said that the oil and energy minister should primarily display ingenuity. Many of today's rules and regulations were written at a time when oil was \$30 a barrel and not \$15 as it is today. The companies should be given a "carrot" to make exploration activity more attractive, Foss said.

He also asked that the following steps be implemented:

Open up more blocks at a faster tempo.

Start year-round drilling in the north starting in the summer of 1987.

Increase the number of "strategic blocks" in the Barents Sea, which companies have shown great interest in.

Announce the 12th round of concessions right after the concessions in the 11th round are assigned. This should be done in June at the latest.

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CSO: 3639/17

ENERGY

FIRST OIL LOADED FROM GULLFAKS FIELD IN NORTH SEA

Oslo AFTENPOSTEN in Norwegian 30 Jan 87 p 35

[Article by Morten Woldsdal]

[Text] A new milestone in the history of Norwegian oil was passed yesterday when the first tanker was loaded with oil from the new Gullfaks field out in the North Sea. The oil will be transported to Statoil's refineries in Mongstad and in Kalundborg, Denmark.

The supertanker "Sarita" is transporting the first oil from the Gullfaks field. The ship will reach Mongstad today and unload half the oil there. It will then proceed to Denmark with the rest of the oil.

The first shipload of Gullfaks oil consists of around 820,000 barrels worth over 100 million kroner based on current oil prices and dollar exchange rates.

Gullfaks began producing oil at the beginning of the year from three wells located down on the ocean floor. The first platform on the field, Gullfaks A, will go into operation in May/June according to the plans of Statoil, the operator of the field.

Statoil's assistant information chief, Stig Ottesen, said that the three underwater wells now produce around 35,000 barrels of oil a day. In February a fourth well will go into operation. That will bring production up to around 60,000 barrels a day. This is also the upper production limit the authorities have set for the next few months in accordance with the decision to reduce Norway's oil production to cooperate with the OPEC countries.

When it is completely developed the Gullfaks field will consist of three big platforms. Platform A will start production in May/June, Platform B will start in the summer of 1988 and Platform C in the early summer of 1990. When all the installations are operating the field will produce around 490,000 barrels of oil a day. At the beginning of the 1990's this will represent around a third of total Norwegian oil production.

Total investment in Gullfaks is estimated at around 60 billion kroner. The field is entirely Norwegian, owned by the three Norwegian oil companies, Statoil, Norsk Hydro and Saga Petroleum.

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CSO: 3639/17

ENERGY

#### BRIEFS

ENERGY CONSUMPTION UP--The consumption of electrical energy in continental Portugal in 1986 showed an increase of 4.5 percent over 1985, totaling 20,575 gigawatt hours. The import-export balance for electrical energy was again negative in 1986, at the level of 64 gigawatt hours, although this was substantially less than the 127 gigawatt hours reported 2 years ago. The public enterprise Electricity of Portugal (EDP) accounted for 95 percent of the electricity produced in the country, excluding the autonomous regions and the cellulose industry, which produces its own supply. Among the countries in the European Community and second only to the Italians, it is the citizens of Portugal who pay the most for their electricity. [Excerpt] [Lisbon DIARIO DE NOTICIAS ECONOMIA in Portuguese 19 Jan 87 p III] 5157

cso:3542/45

ENERGY SWEDEN

#### ENERGY MINISTER PLEDGES NEW POLICIES AS NUCLEAR AGE ENDS

New Technology Needed

Stockholm DAGENS NYHETER in Swedish 26 Jan 87 p 14

[Interview by Dan Magnerot and Bo B. Melander: "Electricity Dependency Must End. Birgitta Dahl Prepared for Tough Fight"]

[Text] "Only the unintelligent do not realize the possibilities offered by new thinking in the area of energy. Too many people within the energy field are hidebound conservatives, who are caught in their own campaign material."

This was said by Birgitta Dahl, energy and environment minister, who has decided to force new thinking about energy. She says that she has had to change her thinking several times and she is not afraid to turn traditional trains of thought upside down.

When she met with the DAGENS NYHETER the worst coldspell so far this winter was over. It was a time when the focus again was on electricity. The power companies, and Birgitta Dahl also for that matter, have been urging us to save on electricity so as not to risk a total breakdown of the system.

Now it is only a couple of degrees below freezing and the calls for conservation have been withdrawn.

A new debate is flaring up in the energy-political area. Industry is gathering all its forces and advertises about the risks involved in closing down nuclear power. They talk about threatened jobs and how low electricity prices are necessary for industrial development.

Opponents to nuclear power and alternative movements are mobilizing their troops. They want a rapid shut-down of nuclear power. They want the plant at Barseback to be closed immediately. Familiar strains from previous years, from the nuclear power debate in the 1970's and the debate before the referendum.

"It is strange that so many people in this field are completely hidebound. Sometimes I call them 'jesuits' and 'latter day saints.' They refuse to think freely and openly. It worries me very much," says Birgitta Dahl.

<sup>&#</sup>x27;Jesuits'

She believes that the thinking on both sides has come to a standstill as a result of the trying fights surrounding nuclear power.

"The result is that the possibilities for technological development cannot be accepted nor can new ideas be received. It is especially surprising when it comes to technicians and industry leaders. What we in Sweden normally brag about and consciously try to develop is our ability to change the structure, to lead and to develop technology.

"We must now take the second step in the modern industrial society—from a naive technology development with prognoses and trends that are said to last forever, to a deliberate technology development. I have seen too many prognoses that have crashed."

## New Thinking

"While this is being discussed, some are completely locked into their way of thinking. But not all. Happily, quite a few people in the industrial field have begun to realize certain things, for instance the basic fact that a future increase in electricity prices and the need for a sane use of electricity actually have nothing to do with the decision to eliminate nuclear power.

"I can also see a positive connection between the most able and most successful industrial leaders in Sweden and those who have the ability to see the new directions. They are often the same people. Outside this group you will find the tired campaigners."

[Question] There will be an increase in the price of electricity fairly soon?

[Answer] Both the price of electricity and the tax system need to be reviewed. We are currently discussing the sale of electricity at the department. I feel that we must seriously study the question of whether the price is right, since we need to fund money for future investments. The price of oil must also be discussed. It must be possible even for the smaller energy producers to enter the large power supply systems with their production of electricity. One way to accomplish that is to raise the price of electricity.

She agrees that the shut-down will cause higher prices if we shut down before the year 2010. On the other hand, the prices will be raised in any event.

"There will still be a shut-down at the end. The fact is that too many people, for too long, have lived in the belief that there is an unending supply of cheap electricity. It is not possible to get another 40 or 100 TWh from water power and all other alternatives are more expensive, even nuclear power. Nuclear power is not a perpetual machine.

"If we are to retain the competitive edge given to us by cheap electricity or cheap energy, we now have only one choice and that is to curtail the use of electricity. And the first thing to go will be electric heating."

[Question] All the nuclear power will not be replaced by new kinds of power?

[Answer] No, it will not, that is my decided answer. Today we use a little over half of the nuclear power for electric heating. In the future, electricity will not be used for normal heating. It will be replaced by economizing and by other heating methods.

[Qestion] Are the long-term energy-political goals firm—Swedish energy resources will be based mainly on renewable domestic energy sources?

[Answer] Yes, and that will be true even if we decide on an earlier shut-down of nuclear power.

[Question] It is being mentioned that a large part of the nuclear power must be replaced by coal and gas liquefying power plants. But neither coal nor gas is a renewable domestic energy source. How does that thought agree with the energy-political goals?

[Answer] It doesn't. And I don't share such an idea. For many years, the problem was that power representatives and members of industry always raised the idea of coal liquefying in the debate. Even in international connections, I have criticized the "fact" that the only alternative electricity resources being discussed are nuclear power or coal liquefying. There are so many other things. We must investigate all means of electricity production besides coal liquefying.

[Question] In an interview with the DAGENS NYHETER before Christmas. Carl-Erik Nyquist, the head of Vattenfall, said that large new gas or coal liquefying plants will be situated where the nuclear power plants are now. Others have expressed the same wish. The power companies have made large investments there, the personnel and the wires are there. Is it not a reasonable request and is it something that you also envision?

[Answer] No, that would be terrible. Some large plants should possibly be built. But it is out of the question that we allow them to use conventional technology. Totally out of the question.

Furthermore, we cannot afford a lot of large coal power plants. The emphasis in our country has to be placed on economy and a more effective use of electricity. That cannot be stressed enough. The thought behind the new system is that it will consist of many parts and that it will be flexible. Instead of a few major employers, we want to spread the job opportunities both over time and around the country. Everyone will benefit from that!

[Question] How will you get the power producers interested in user technology and in economizing?

[Answer] New instructions are needed, like the ones we have given to Vattenfall. Alternatively, new companies ought to be formed. Vattenfall should be a general energy company taking care of both economizing and use as well as a multifaceted energy production, while it participates in the shut-down of nuclear power and makes it possible.

Things are not all black. Vattenfall and Sydkraft understand that new ideas are necessary. Among other things, they have realized that top production of electricity is unprofitable. Consequently, they have started development of new energy technology on their own.

If the power companies have trouble redirecting their technicians, I can tell them that there are major new tasks for them within the area of more effective use of electricity. It is work that demands competence. And there are tasks that are at least as interesting as in the large-scale planning models.

[Question] Might there be laws to force the power producers to think again?

[Answer] Yes, that will be the way to go if they don't go along voluntarily. But I think that it would be well worth a try to get the power companies on our side. I have talked to them through the years, I have changed Vattenfall's instructions and more or less forced them into wind power development and cooperation with the communities. It is not a good idea to create only defensive positions, that just increases conservatism.

[Question] A considerable change in the Swedish electrical system was pushed through with the strong investment in nuclear power. Industry and politicians cooperated. Are you as strong now, when a new investment, still not very attractive to certain people within the industry, has to be made?

[Answer] I certainly hope that the other parties, the union movement, large parts of industry, and the Swedish people will stand behind a major national focus on a domestic, environmentally safe and good energy system which, furthermore, could be a launching pad for export. We really have a chance for a powerful investment and a broad honorable agreement between the parties.

[Question] How is industry going to be convinced that the road you are taking is the right one?

[Answer] When the industry and the power companies ridicule the focus on new energy technology, our investment program or our decision to shut down nuclear power by the year 2010, I just mention nuclear power as an example of strength when a new era started. They went along then and they might as well do so now.

#### Dependency on Electricity

Birgitta Dahl says that the problems of industry cannot be solved by a continued increased use of electricity. Instead, electricity ought to be used as effectively as is technologically possible and only where it cannot be replaced. She says that she has learned to reverse the traditional view of industry's dependency on electricity and the need for keeping the price of electricity low in order to maintain the competitive edge abroad.

"If industry could lower the energy costs where they are as high as the costs of wages, there is no better or more suitable way to lower production costs. The alternatives are unemployment or lowered wages. That's where I've had to change my thinking."

[Question] Would you like to see an evaluation fo the progress of the Swedish power system?

[Answer] It might be interesting but it is more important that we act now. It is true that Sweden is a small country, that much of the investigative system and that kind of thing repeats itself. It is, of course, important that we have good reports and that we can learn from what we have done earlier. But that is a theoretical direction and I am a practical politician.

[Question] How will the new venture be financed?

[Answer] Profits from old chaep electricity production are going to finance and help produce the new energy during the ten, fifteen difficult years while nuclear power is being eliminated. The investments in new technology must be paid for by the profits from old water power, among other things.

[Question] Much of the industry's and the power companies' point of view is reflected in the reports that have been made on energy. What is found there does not seem to agree with your point of view. Is that right?

[Answer] Most of the electricity reports are far too conservative. Furthermore, they do not take into account the fact that it is our duty as civilized people to influence progress. And that is true whether we are politicians, researchers or technicians.

If we want to use our lives and our knowledge for something good, we should intervene in and direct progress. You can't just passively watch progress in the wrong direction.

We actually face a historical opportunity to turn this ship around and we ought to grab that opportunity. We have so much to gain. Reserachers, technicians, unions and businesses would have marvellous things to do instead of repeating old planning or replacing old ways of heating water with other old ways, with old-fashioned methods.

[Question] There are very few interested parties that have control over the Swedish power production. Since you are responsible for Vattenfall, which is the largest, you have the greatest influence, in a manner of speaking. How will you use it?

[Answer] I'm not sure that the existing system needs to be taken apart. I'm not a revolutionary but a convinced reformer. There are certainly parts of the system that have to be changed and people in it who have to change their point of view. We need cooperation between the small and the large and we are deifinitely not going to have someone who rules everything alone.

That is why, paradoxically, I think it's good that Vattenfall is the largest and that it has strong competitors.

[Question] You can hardly call the competition strong?

[Answer] You have to keep in mind that Sweden is a small country.

[Question] A proposed energy resolution will be based on reports that are partially permeated by what you call repetition, that is to say the large-scale structural thinking. Do you dare to reverse that way of thinking?

[Answer] Yes, of course I do. There is a lagging traditionalism which makes work more difficult than it ought to be. I wish that many more would have the courage to turn the whole argument upside down, they'd feel better for it. I am prepared to accept such a challenge. But everything in the reports should not be rejected.

I would like to give you more information about our plans but for party-political reasons I can't. We are starting to discuss these questions now. I will be present when the party-leader debates start on February 5. Come back again and you will see that we do have the courage to turn things related to energy upside down.

[Question] What kind of support do you have for a new energy-political direction in the government?

[Answer] I have ample support. However, the educational difficulties of disseminating the facts about reality constitute a major problem within the complicated fields of energy and environment. It is easy for me to see how it is, since I work with these questions every day.

Stop the Waste

"It is very important that everyone realizes that we can no longer have unrestrained expansion of production and, thereby, solve all the problems associated with the provision of electricity. Wasteful technology is extremely dangerous. It uses up future resources and adds environmental damage to environmental damage and will suddenly result in dreadful catastrophes.

"In that sense, the expansion society lies behind us. We must now figure out how, in the future, we can utilize, in a better manner, the resources that are already available to us. With today's technology, an energy-efficient society is not weak but strong. What surprises me is that so few people realize that."

End to Electric Heating

Stockholm DAGENS NYHETER in Swedish 26 Jan 87 p 14

[Article by Dan Magnerot]

[Text] When nuclear power is completely shut down, about 60 billion kilowatt hours of electricity production annually will disappear. At least half of that is to be saved through more efficient use of electricity.

Work is now under way at the Deprtment of Environment and Energy on a number of proposals for the replacement of nuclear power. These proposals will be discussed at the party-leader debates at the beginning of February. Among the things that Birgitta Dahl, the energy and environment minister, is bringing to the meeting are:

The end of electric heating mainly by a more efficient use of electricity and by a conversion from electricity to other kinds of energy for heating.

A focus on new energy technology such as solar heating or the low temperature technology that is being developed.

Natural gas and heat from combined power and heating plants will be utilized as far as possible.

A major focus will be placed on more efficient use of electricity.

At the present time, a drastic increase in the cost of electricity is not being considered, even though an increase is likely as soon as this fall.

At the same time, new rules for the use of electricity have been introduced. The power that is to replace nuclear power will be produced by a few small environmentally safe coal liquefying power plants and by heat-electric and back-pressure plants. Great hope is placed on small back-pressure plants as well as on wind power.

In regards to the 500,000 or so single-family homes that now have nothing but electric heat, the department is counting on a long-term remodeling project. There are probably a few other things in Birgitta Dahl's energy package, but they are cloaked in secrecy. The questions must first be thoroughly discussed within the party.

12339 CSO: 3650/55 ENVIRONMENTAL ISSUES NORWAY

#### SOVIETS SEEN MAIN AIR POLLUTERS IN SVALBARD AREA

Oslo AFTENPOSTEN in Norwegian 24 Jan 87 p 9

[Article by Torill Nordeng]

[Text] The pure Arctic winter is a myth. A 5-year research project conducted by the Norwegian Institute for Air Pollution (NILU) at the expense of British Petroleum (BP) shows that there is as much sulfur dioxide and sulfate in the air over Svalbard as there is in other Nordic areas, in spite of the fact that there are no local sources of pollution on Svalbard. Much of the pollution can be traced to industrial areas in the northern Soviet Union.

The implementation of NILU's 5-year program has cost BP 22 million kroner.

"The largest amounts of sulfur dioxide and sulfate are found in late winter and early spring," said NILU director Brynjulf Ottar. "The concentrations are greatest in the winter half of the year because air currents flow toward Svalbard at that time of the year."

"And the reason why the polluted air can often be traced back to the Soviet Union is that the air currents come from the southeast," added NILU researcher Oystein Hov.

The northern areas of the Soviet Union have low winter temperatures. Therefore the polluted air stays close to the ground. In the summer the NILU researchers do not find polluted air from the Soviet Union. "It is there, it is just higher up in the troposphere and it is diluted," How said.

## Three Layers

The polluted air over the Arctic, which is best noted in the winter because the air is colder then, can be divided into three different layers, according to Brynjulf Ottar. "The lowest layer of air contains pollution from the northern Soviet Union. In the next layer of air we find the residue of pollution from Europe. This rises higher because ground temperatures are high. Up at an altitude of 5-6,000 meters dust from much warmer areas can be found. We find sand from the Gobi and Sahara deserts in this air layer," Ottar said.

## Arctic Haze

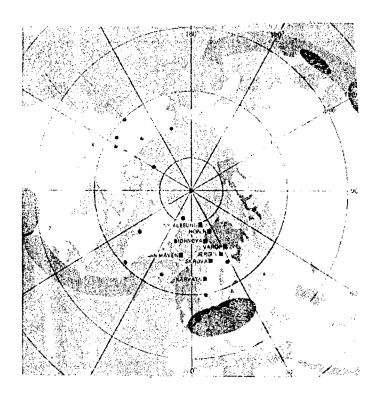
Incidentally, the sand from Asian deserts has been used as an explanation of why a very special haze forms over the Arctic in the wintertime.

"Even though we now know that sand from the Sahara can be found in the air 5,000 meters above Svalbard the hot sand is not the reason for the haze," said Ottar. "It is due to concentrations of substances from human activities—industrial pollution."

#### No Dead Trees

Acid precipitation and dead trees will never be a problem on Svalbard, said Oystein Hov. In the winter, when pollution is noted, Svalbard is like a desert with very little precipitation. And there are no trees that far north.

The local damage to Svalbard does not disturb Hov. However he said that the Arctic is like a reflection of the atmospheric changes in the entire northern hemisphere. "In this area that does not create pollution itself we can measure the extent of global pollution and form a picture of the future," he said.



The map shows an overall view of the measurement stations for air pollution in the entire Arctic region. The arrows indicate usual wind directions. The dark area shows pollution sources.

#### Future

Whether the pollution over the Arctic will create a milder or colder climate is hard to say, according to Ottar and Hov. The layer of polluted air can prevent sunshine from reaching the ground. That would make it colder. The polluted layer can also prevent the ground from sending heat back into space. Then it will be warmer. The latter is probably what will happen.

In order to use the knowledge that has been acquired from several years of study and surveying, NILU wants to continue its research on Svalbard. Ottar said that NILU has requested 5 million kroner from the state for the purpose of setting up a measurement station on one of the mountaintops in Ny-Alesund. Here NILU will measure the occurrence of various gases found in the troposphere.

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